



# spectra no frame flex

linha de luminárias embutidas circulares, ideal para forros. disponível com moldura discreta (mini frame) ou sem moldura (no frame), garantindo integração limpa e contemporânea à arquitetura. com opções de fecho fixo ou orientável, a linha oferece múltiplos tamanhos e potências com estética unificada, permitindo uma identidade visual coesa em todo o projeto. o conjunto óptico e a moldura em alumínio pintado proporcionam excelente controle de ofuscamento e conforto visual. a fixação é prática e segura: por molas em aço inox (mini frame) ou aro de fixação (no frame), garantindo aderência perfeita ao forro e acabamento refinado. ideal para projetos que valorizam estética e funcionalidade na iluminação.

## informações técnicas

fonte de luz  
LED integrado

IRC  
alto índice de reprodução de cor (irc>90 | r9>60)

vida útil  
50.000h

potência (W), fecho, temperatura de cor (K),  
fluxo nominal (lm nominal), fluxo útil (lm útil)

| W  |  | K    | lm nominal | lm útil |
|----|-----------------------------------------------------------------------------------|------|------------|---------|
| 6  | concentrado                                                                       | 2700 |            |         |
| 6  | médio                                                                             | 2700 |            |         |
| 6  | aberto                                                                            | 2700 |            |         |
| 6  | concentrado                                                                       | 3000 | 654        | 478     |
| 6  | médio                                                                             | 3000 | 654        | 509     |
| 6  | aberto                                                                            | 3000 | 654        | 528     |
| 6  | concentrado                                                                       | 4000 |            |         |
| 6  | médio                                                                             | 4000 |            |         |
| 6  | aberto                                                                            | 4000 |            |         |
| 12 | concentrado                                                                       | 2700 |            |         |
| 12 | médio                                                                             | 2700 |            |         |
| 12 | aberto                                                                            | 2700 |            |         |
| 12 | concentrado                                                                       | 3000 | 1185       | 840     |
| 12 | médio                                                                             | 3000 | 1185       | 902     |
| 12 | aberto                                                                            | 3000 | 1185       | 939     |
| 12 | concentrado                                                                       | 4000 |            |         |
| 12 | médio                                                                             | 4000 |            |         |
| 12 | aberto                                                                            | 4000 |            |         |
| 18 | concentrado                                                                       | 2700 |            |         |
| 18 | médio                                                                             | 2700 |            |         |
| 18 | aberto                                                                            | 2700 |            |         |
| 18 | concentrado                                                                       | 3000 | 1585       | 1130    |
| 18 | médio                                                                             | 3000 | 1585       | 1192    |
| 18 | aberto                                                                            | 3000 | 1585       | 1243    |
| 18 | concentrado                                                                       | 4000 |            |         |
| 18 | médio                                                                             | 4000 |            |         |
| 18 | aberto                                                                            | 4000 |            |         |

**equipamentos**

LED driver 180mA (ponto remoto)

LED driver 350mA (ponto remoto)

LED driver 500mA (ponto remoto)

**controle**

on/off

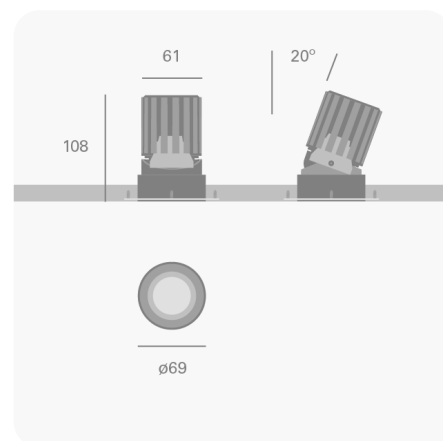
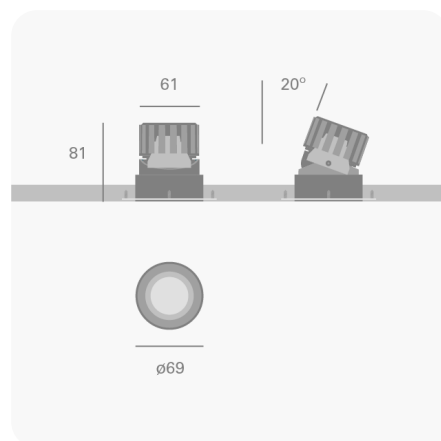
dim fphase

**instalação**

forro de gesso

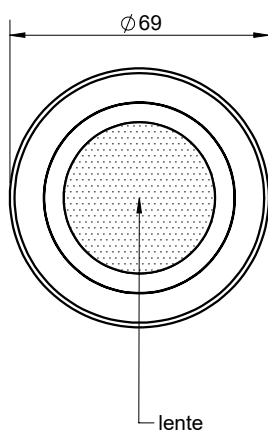
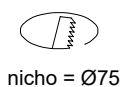
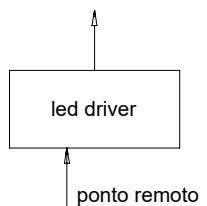
**IP**

20

**dimensões**

**acabamentos e cores**
**cores**


## vista inferior

dimensões em milímetros



## spectra flex no frame 6w/12w

folha  
1/1

escala  
1:2

data  
22/07/2025

desenhista  
joão v.

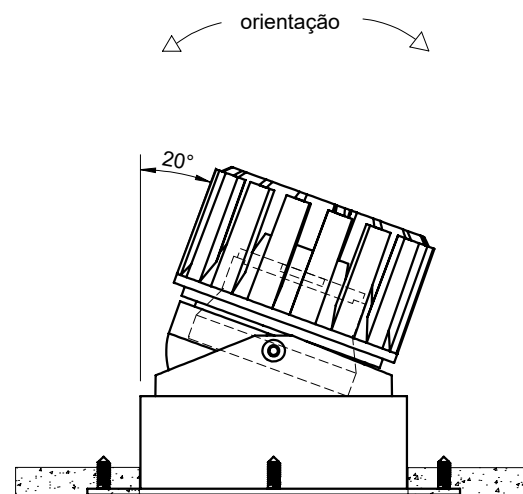
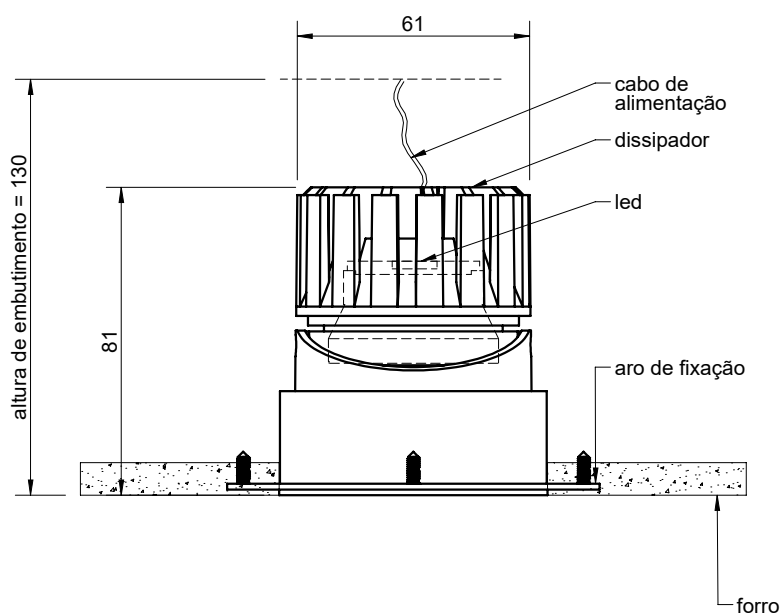
aprovação  
ronaldo

revisões  
22/07/2025

## vista lateral

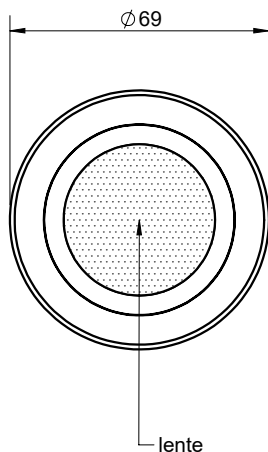
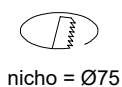
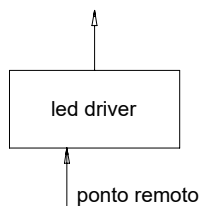
dimensões em milímetros

para maiores informações,  
consulte a área técnica  
[produto@lumini.com.br](mailto:produto@lumini.com.br)



## vista inferior

dimensões em milímetros



## spectra flex no frame 18w

folha  
1/1

escala  
1:2

data  
22/07/2025

desenhista  
joão v.

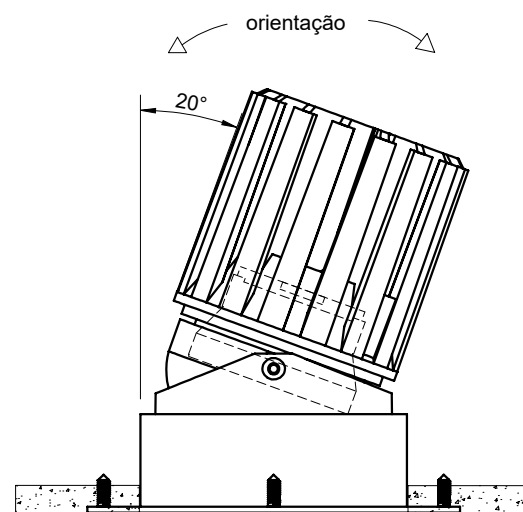
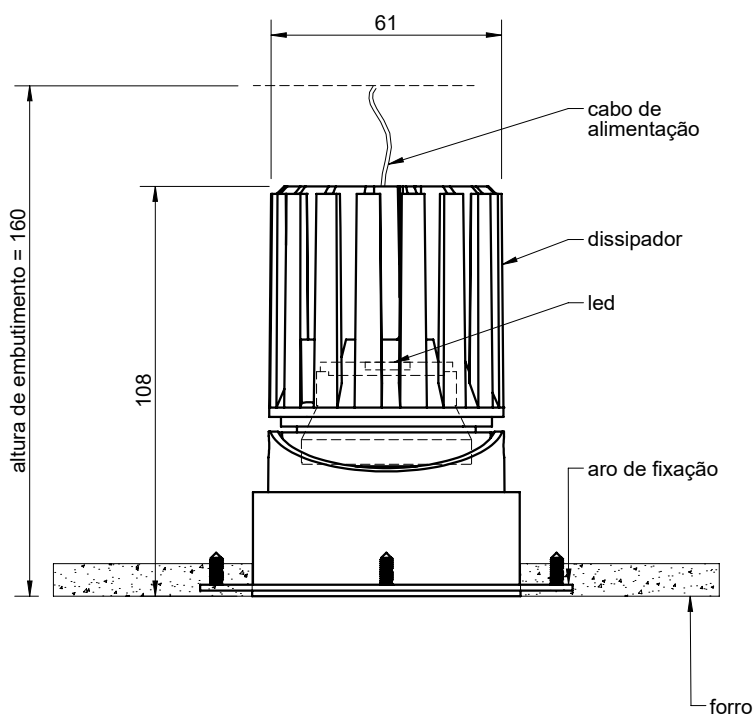
aprovação  
ronaldo

### revisões

22/07/2025

## vista lateral

dimensões em milímetros



para maiores informações,  
consulte a área técnica  
[produto@lumini.com.br](mailto:produto@lumini.com.br)



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email:laboratorio@lumini.com.br  
Tel:+55 11 3437-5555 Fax:+55 11 3437-5555  
Address:Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex no frame fc

LampCAT: modulo led 6W 30K irc 90

Ballast type: led driver 180mA

Report No:

Voltage(V): 127.8400

Test No:

Current(A): 0.0650

Number of Lamps: 1

Power (W): 8.2090

Lamp flux(lm): 654.0

PF: 0.9870

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 478.28, Efficiency(%): 73.13% , Luminous Efficacy(lm/W): 58.26

Central intensity(cd): 4752.966, Maximum intensity(cd): 4752.966

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam angle of C0 plane : 14.81

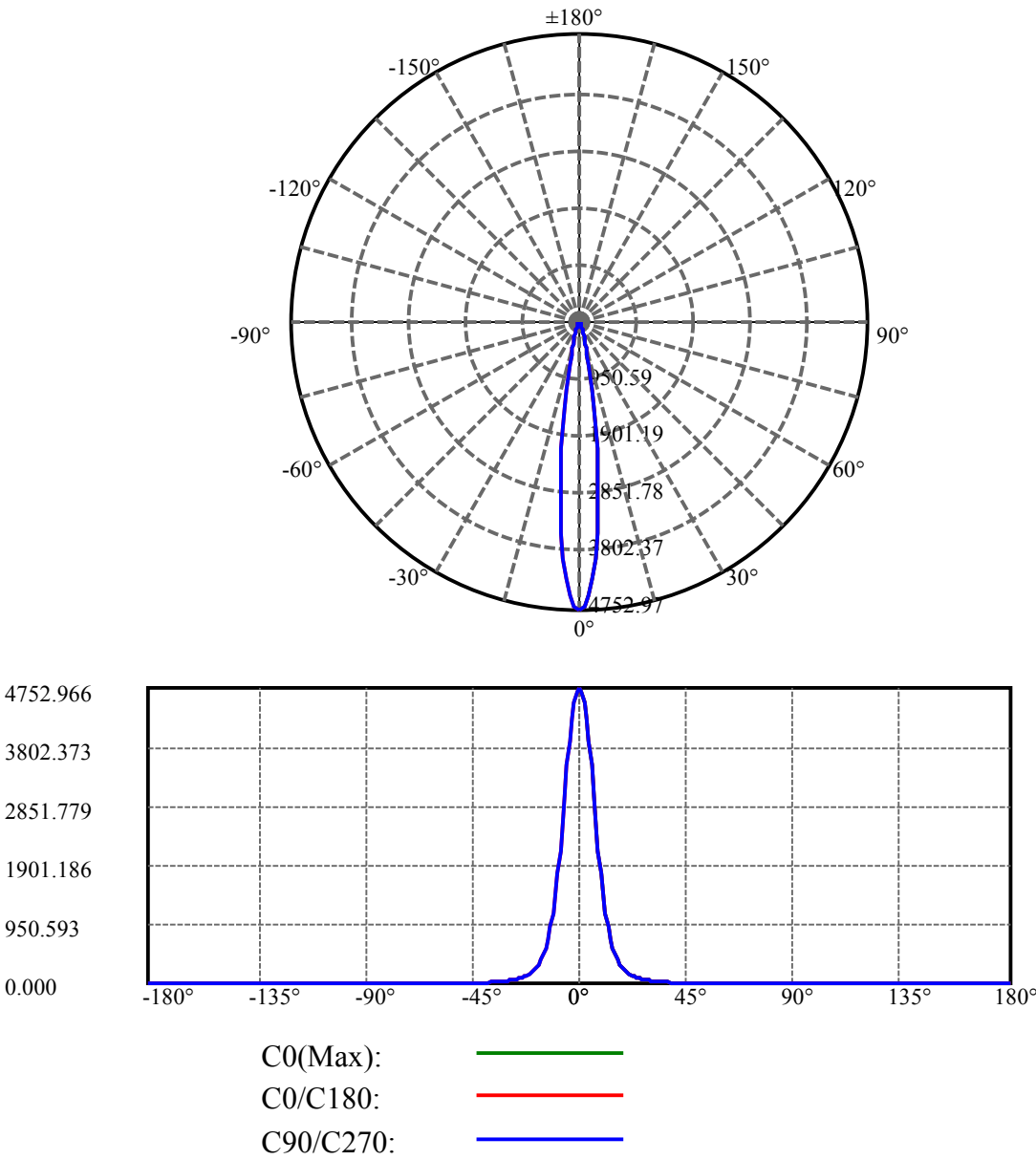
Aveage BeamAngle(IEC 61341):14.81

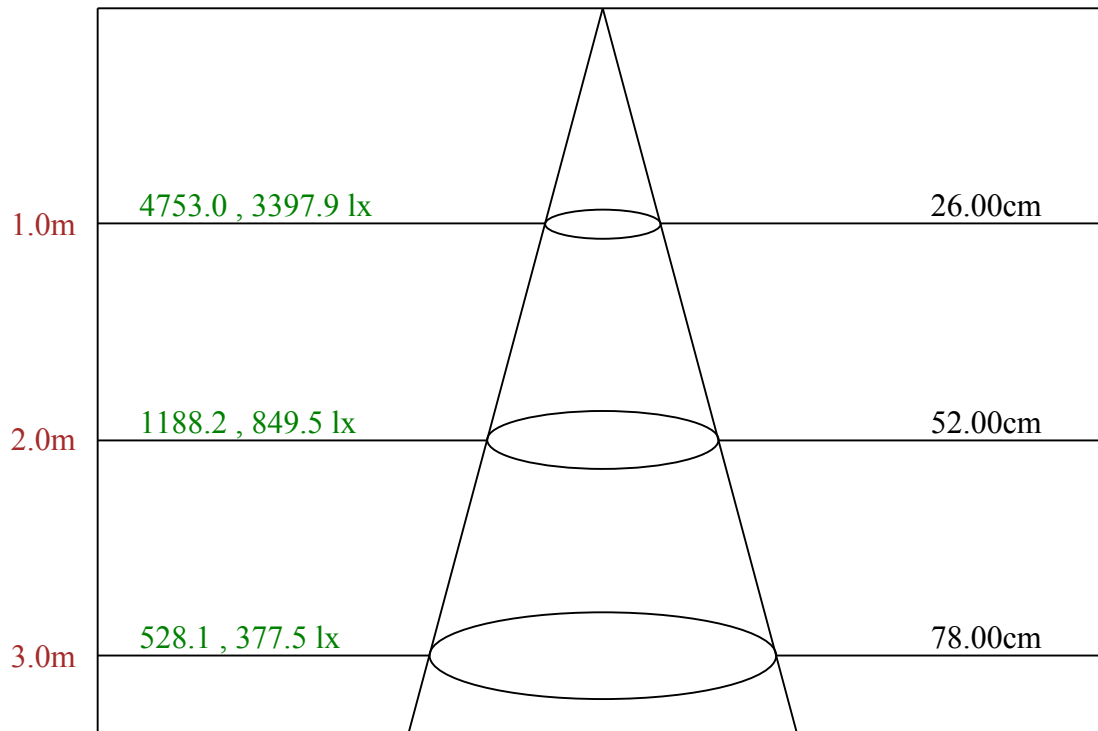
---

Equipment: equipamento lumini  
Temperature(°C): 25.0

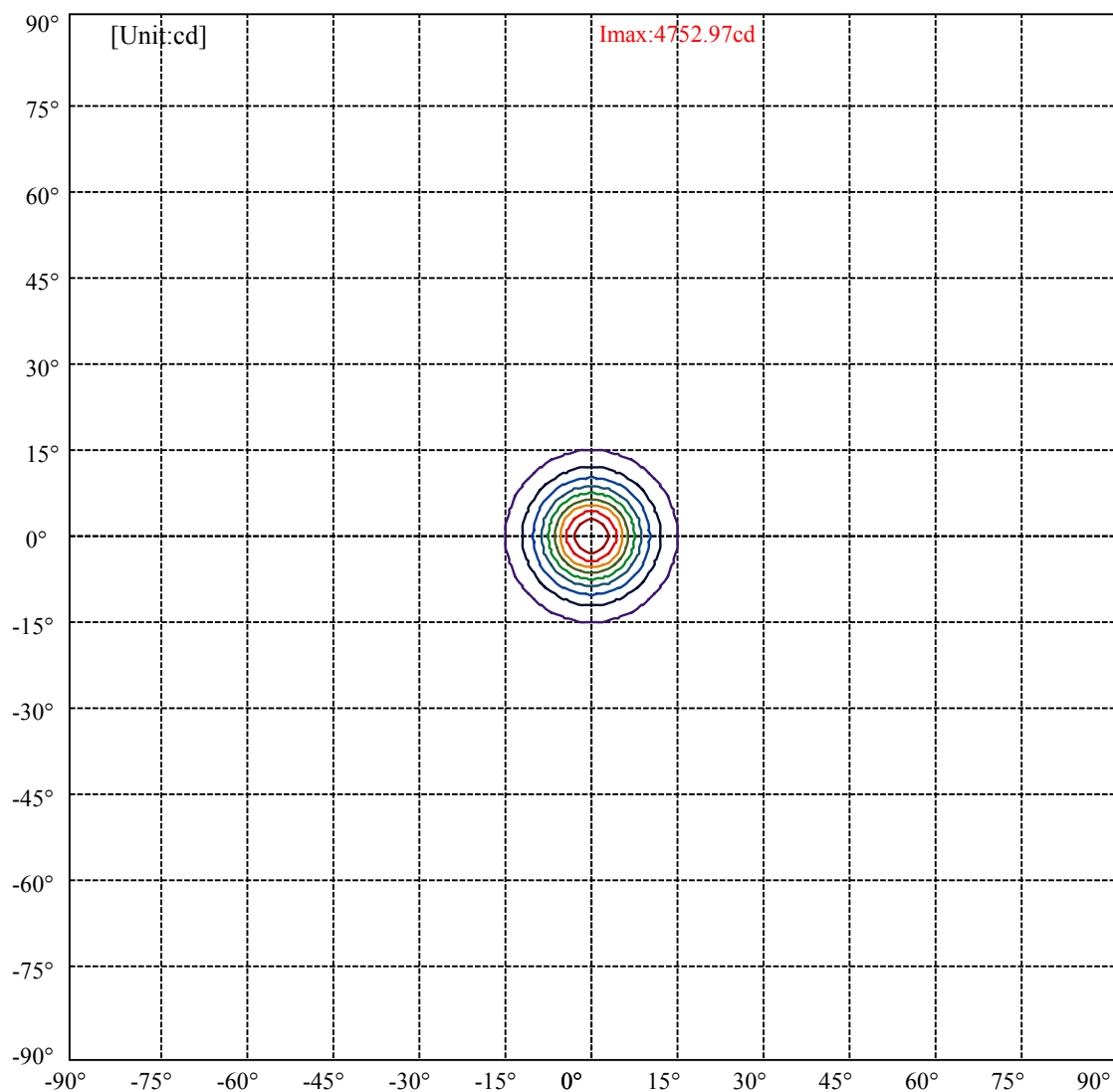
Date: 25/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90





Max , Ave      Beam angle of C0 plane 14.81



|                   |       |
|-------------------|-------|
| (10%Imax) 475.297 | ————— |
| (20%Imax) 950.593 | ————— |
| (30%Imax) 1425.89 | ————— |
| (40%Imax) 1901.19 | ————— |
| (50%Imax) 2376.48 | ————— |
| (60%Imax) 2851.78 | ————— |
| (70%Imax) 3327.08 | ————— |
| (80%Imax) 3802.37 | ————— |
| (90%Imax) 4277.67 | ————— |

Luminance Table

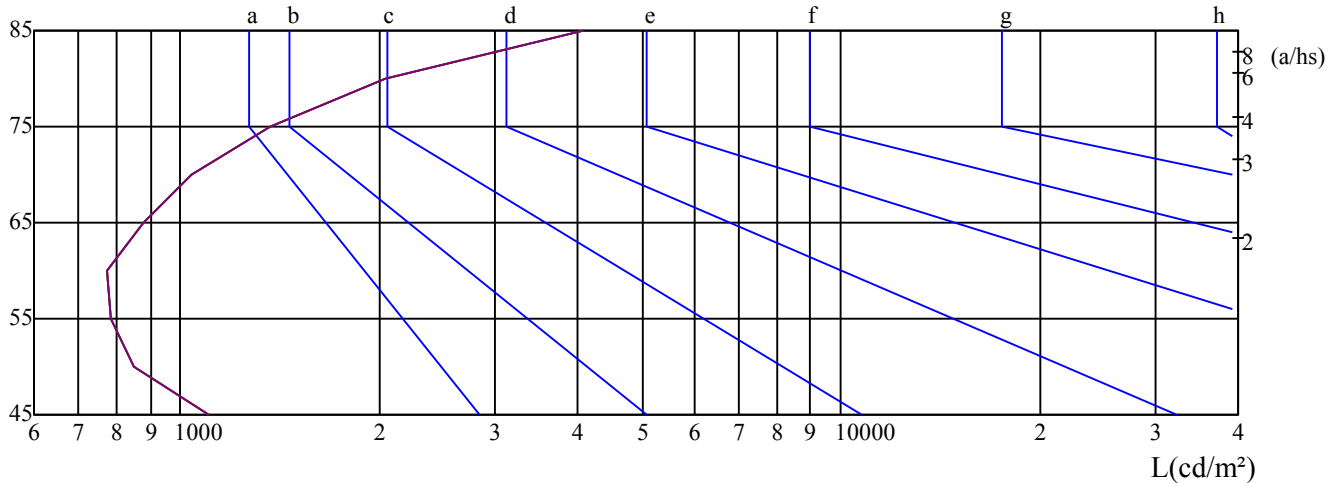
| $\gamma$ | 45   | 50  | 55  | 60  | 65  | 70   | 75   | 80   | 85   |
|----------|------|-----|-----|-----|-----|------|------|------|------|
| C0       | 1104 | 848 | 783 | 775 | 880 | 1038 | 1371 | 2044 | 4073 |
| C45      | 1104 | 848 | 783 | 775 | 880 | 1038 | 1371 | 2044 | 4073 |
| C90      | 1104 | 848 | 783 | 775 | 880 | 1038 | 1371 | 2044 | 4073 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 880        | 880        | 880     | 1371       | 1371       | 1371    | 4073       | 4073       | 4073    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email: laboratorio@lumini.com.br  
Tel: +55 11 3437-5555 Fax: +55 11 3437-5555  
Address: Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex no frame fm

LampCAT: modulo led 6W 30K irc 90

Ballast type: led driver 180mA

Report No:

Voltage(V): 127.8400

Test No:

Current(A): 0.0650

Number of Lamps: 1

Power (W): 8.2050

Lamp flux(lm): 654.0

PF: 0.9870

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 509.02, Efficiency(%): 77.83% , Luminous Efficacy(lm/W): 62.04

Central intensity(cd): 3632.536, Maximum intensity(cd): 3632.536

Angle of maximum intensity:  $C=0.0$   $\gamma=0.0$

Beam angle of C0 plane : 19.58

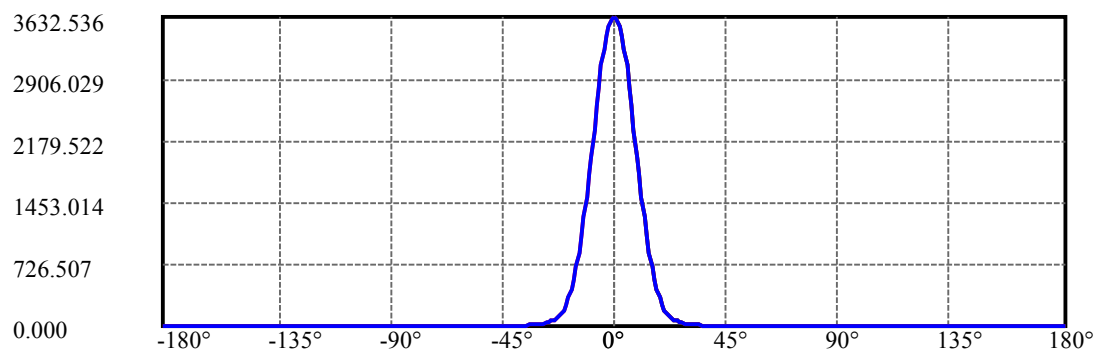
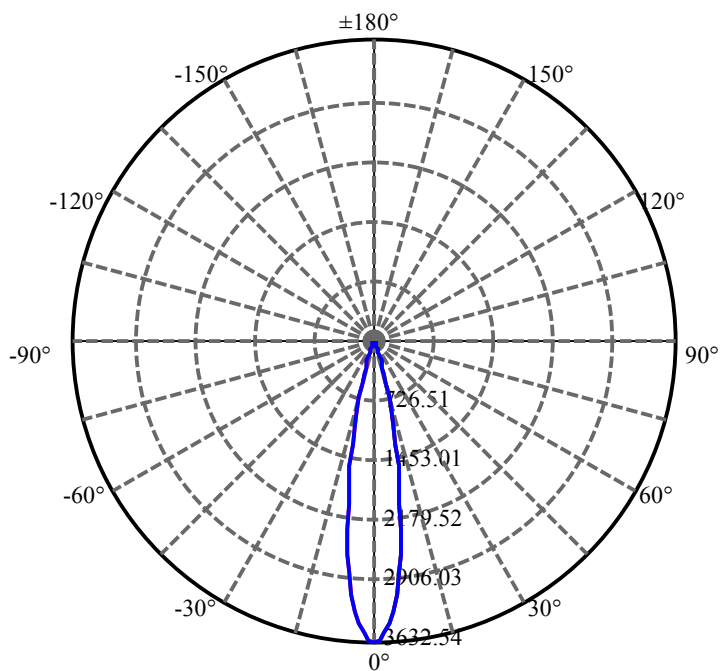
Average BeamAngle(IEC 61341): 19.58

---

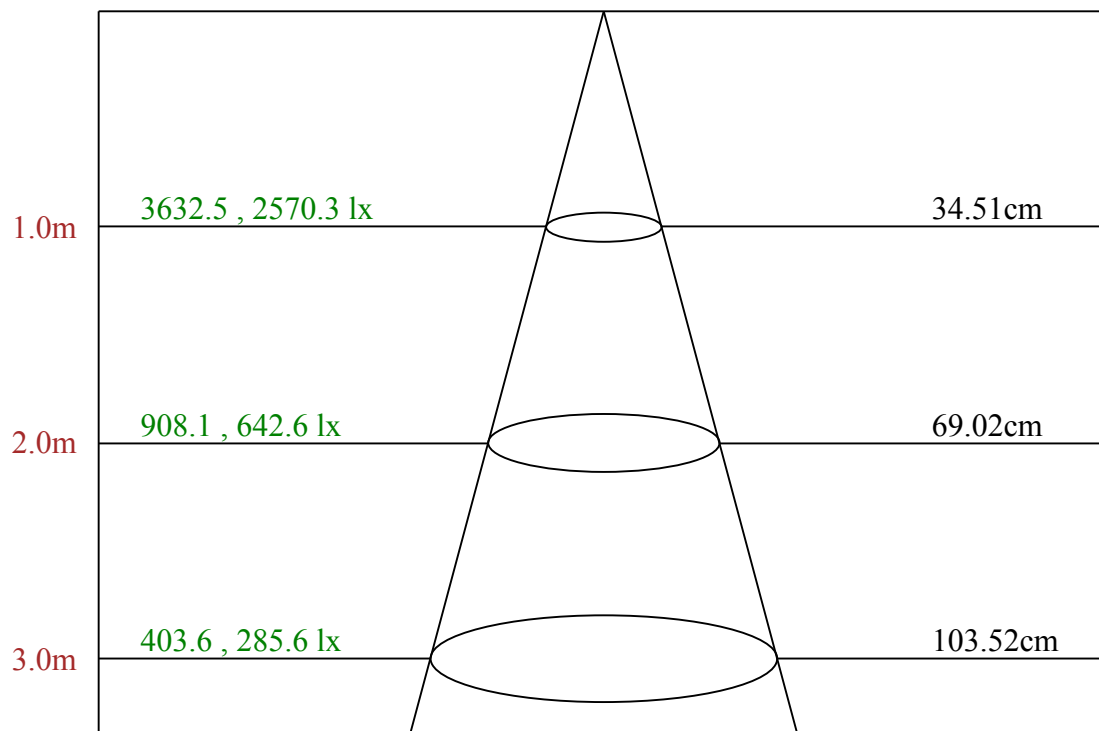
Equipment: equipamento lumini  
Temperature(°C): 25.0

Date: 25/06/2025  
Humidity(%): 58.0%

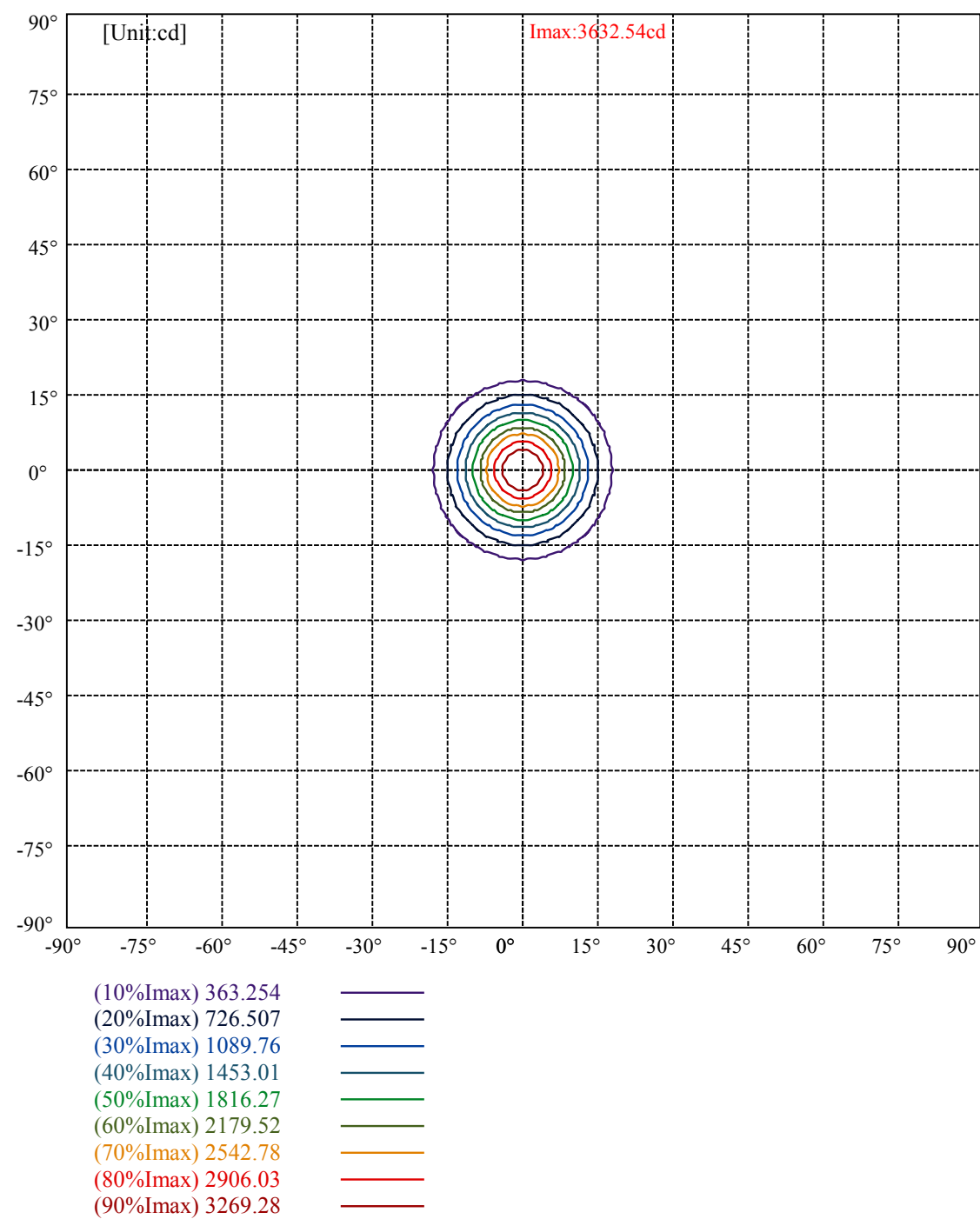
Operator: 01  
Distance(m): 6.90



C0(Max):  
C0/C180:  
C90/C270:



Max , Ave      Beam angle of C0 plane 19.58



# lumini

## Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50  | 55  | 60  | 65  | 70   | 75   | 80   | 85   |
|----------|------|-----|-----|-----|-----|------|------|------|------|
| C0       | 1102 | 905 | 869 | 865 | 993 | 1194 | 1589 | 2377 | 4719 |
| C45      | 1102 | 905 | 869 | 865 | 993 | 1194 | 1589 | 2377 | 4719 |
| C90      | 1102 | 905 | 869 | 865 | 993 | 1194 | 1589 | 2377 | 4719 |

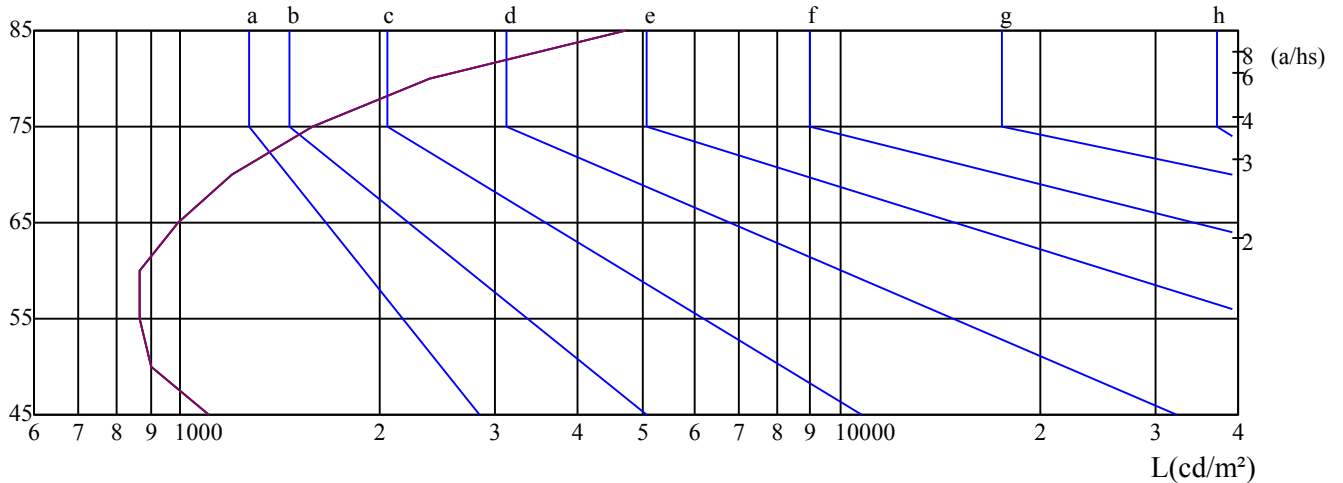
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 993        | 993        | 993     | 1589       | 1589       | 1589    | 4719       | 4719       | 4719    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 —

C45 —

C90 —

Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 25/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email: laboratorio@lumini.com.br  
Tel: +55 11 3437-5555 Fax: +55 11 3437-5555  
Address: Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fa

LampCAT: modulo led 6W 30K irc 90

Ballast type: led driver 180mA

Report No:

Voltage(V): 127.8400

Test No:

Current(A): 0.0650

Number of Lamps: 1

Power (W): 8.2110

Lamp flux(lm): 654.0

PF: 0.9870

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 527.51, Efficiency(%): 80.66% , Luminous Efficacy(lm/W): 64.24

Central intensity(cd): 1544.337, Maximum intensity(cd): 1545.248

Angle of maximum intensity:  $C=0.0$   $\gamma=2.0$

Beam angle of C0 plane : 33.52

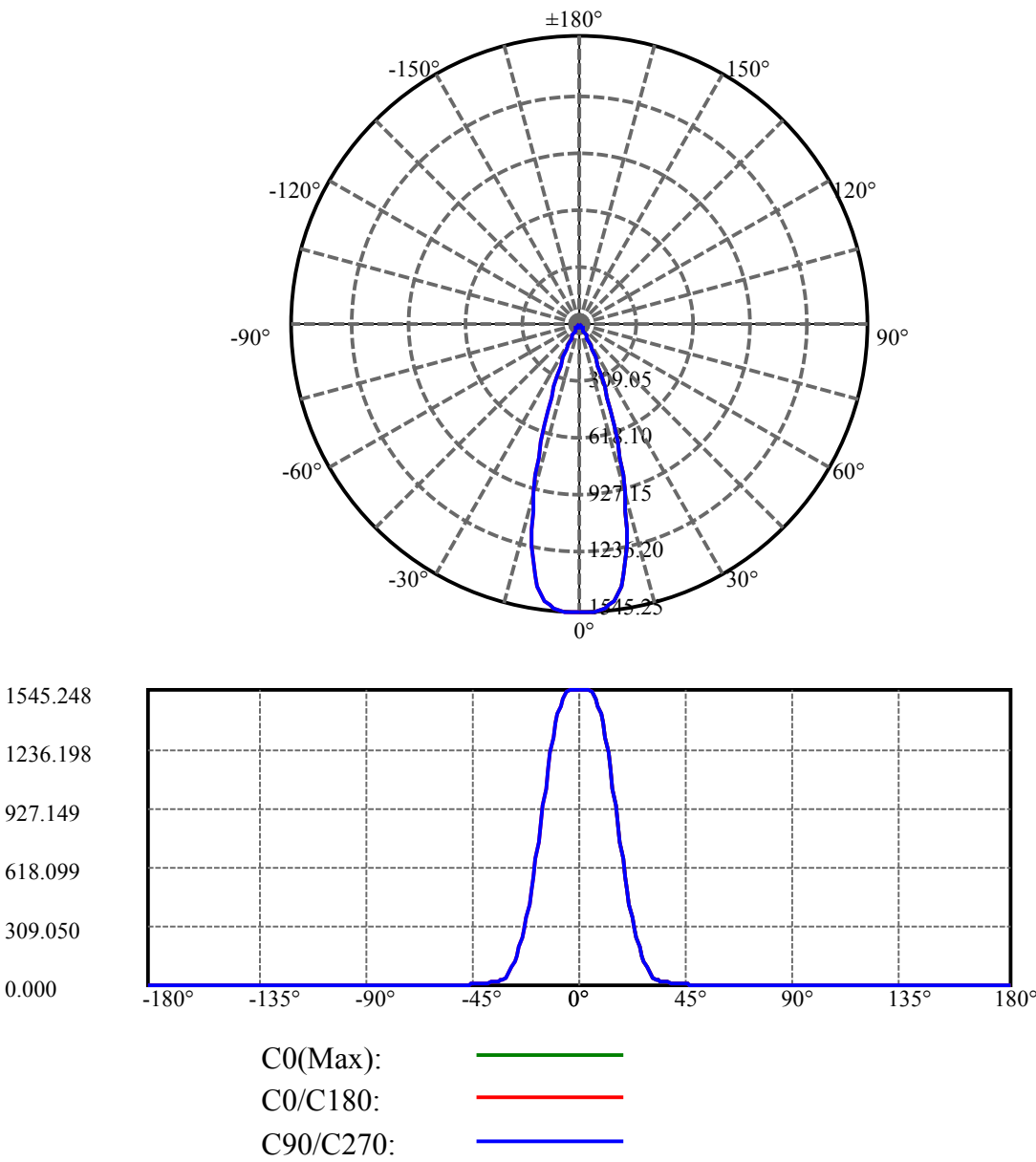
Average BeamAngle(IEC 61341): 33.52

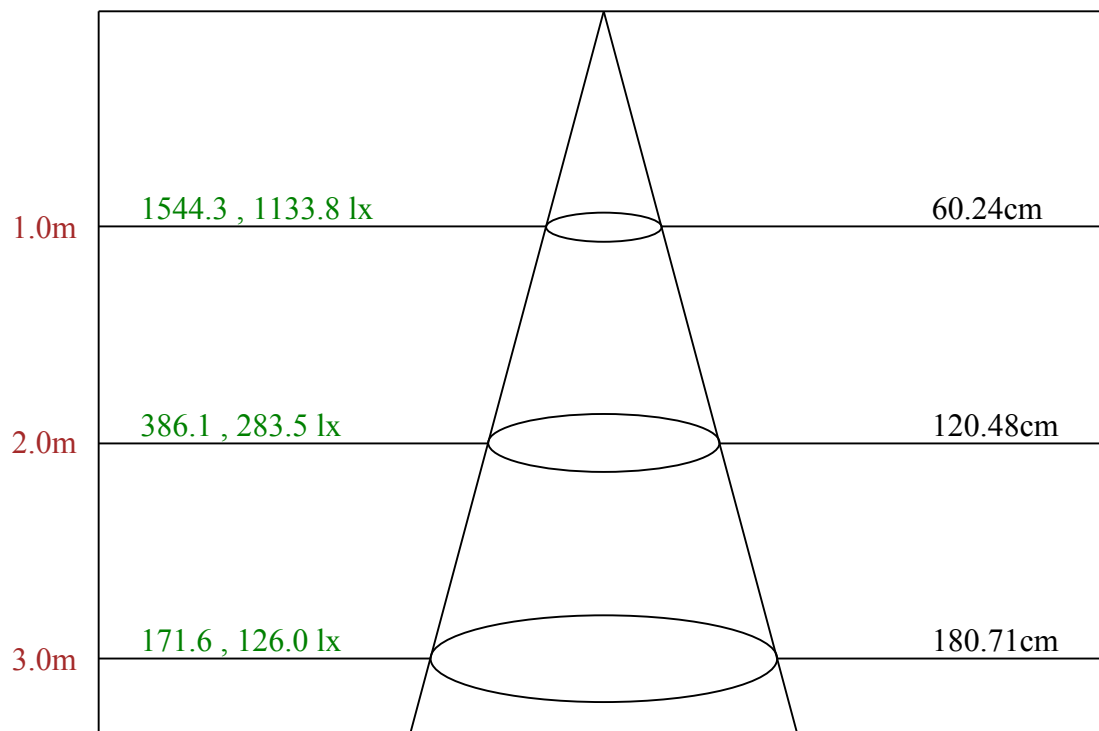
---

Equipment: equipamento lumini  
Temperature(°C): 25.0

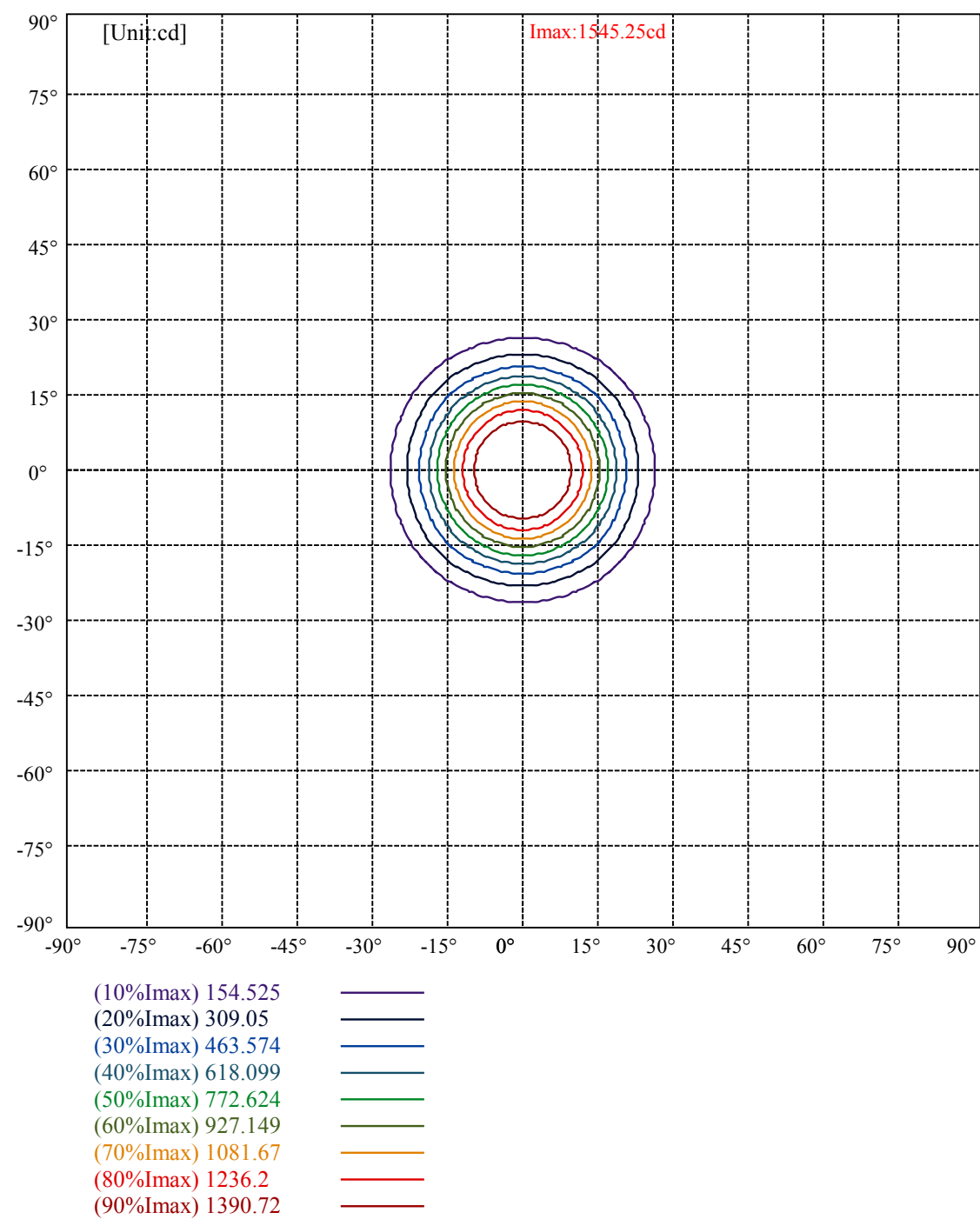
Date: 25/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90





Max , Ave      Beam angle of C0 plane 33.52



# lumini

## Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50   | 55  | 60  | 65  | 70   | 75   | 80   | 85   |
|----------|------|------|-----|-----|-----|------|------|------|------|
| C0       | 1641 | 1056 | 862 | 862 | 953 | 1157 | 1535 | 2304 | 4525 |
| C45      | 1641 | 1056 | 862 | 862 | 953 | 1157 | 1535 | 2304 | 4525 |
| C90      | 1641 | 1056 | 862 | 862 | 953 | 1157 | 1535 | 2304 | 4525 |

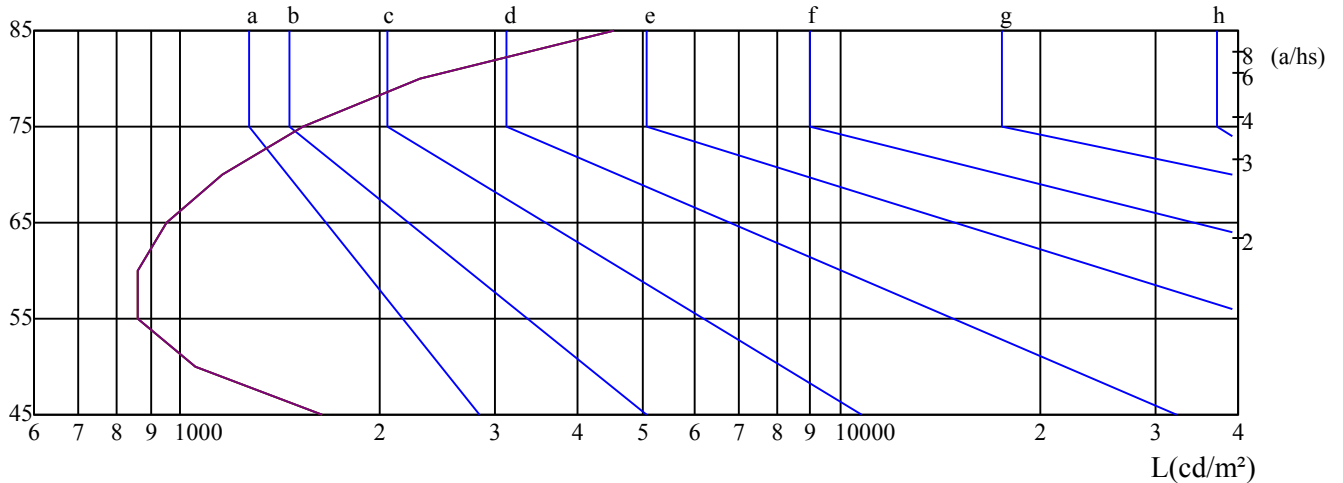
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 953        | 953        | 953     | 1535       | 1535       | 1535    | 4525       | 4525       | 4525    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 —

C45 —

C90 —

Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 25/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email:laboratorio@lumini.com.br  
Tel:+55 11 3437-5555 Fax:+55 11 3437-5555  
Address:Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fc

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 350mA

Report No:

Voltage(V): 127.7300

Test No:

Current(A): 0.1160

Number of Lamps: 1

Power (W): 14.6030

Lamp flux(lm): 1185.0

PF: 0.9860

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 839.77, Efficiency(%): 70.87% , Luminous Efficacy(lm/W): 57.51

Central intensity(cd): 8709.679, Maximum intensity(cd): 8709.679

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam angle of C0 plane : 14.69

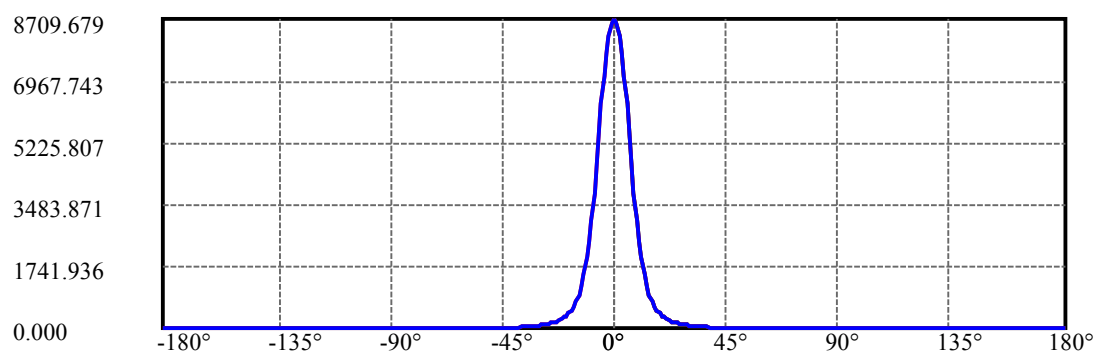
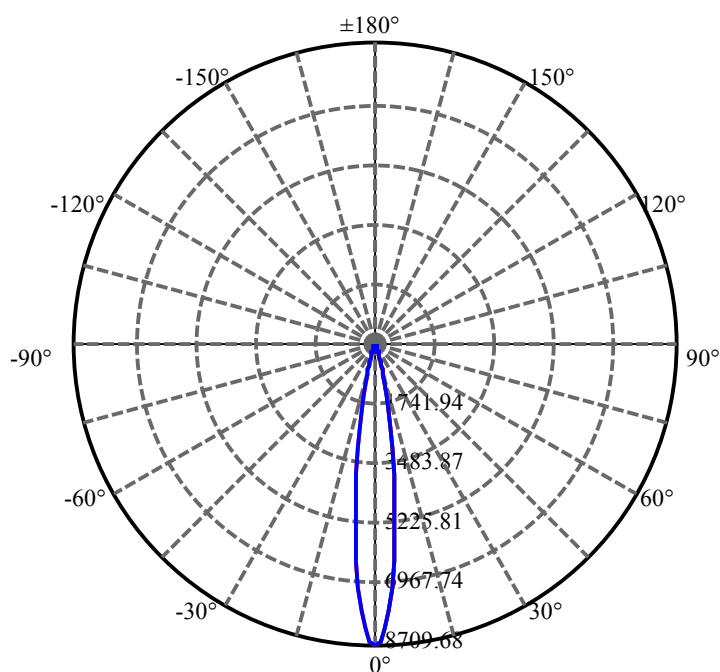
Aveage BeamAngle(IEC 61341):14.69

---

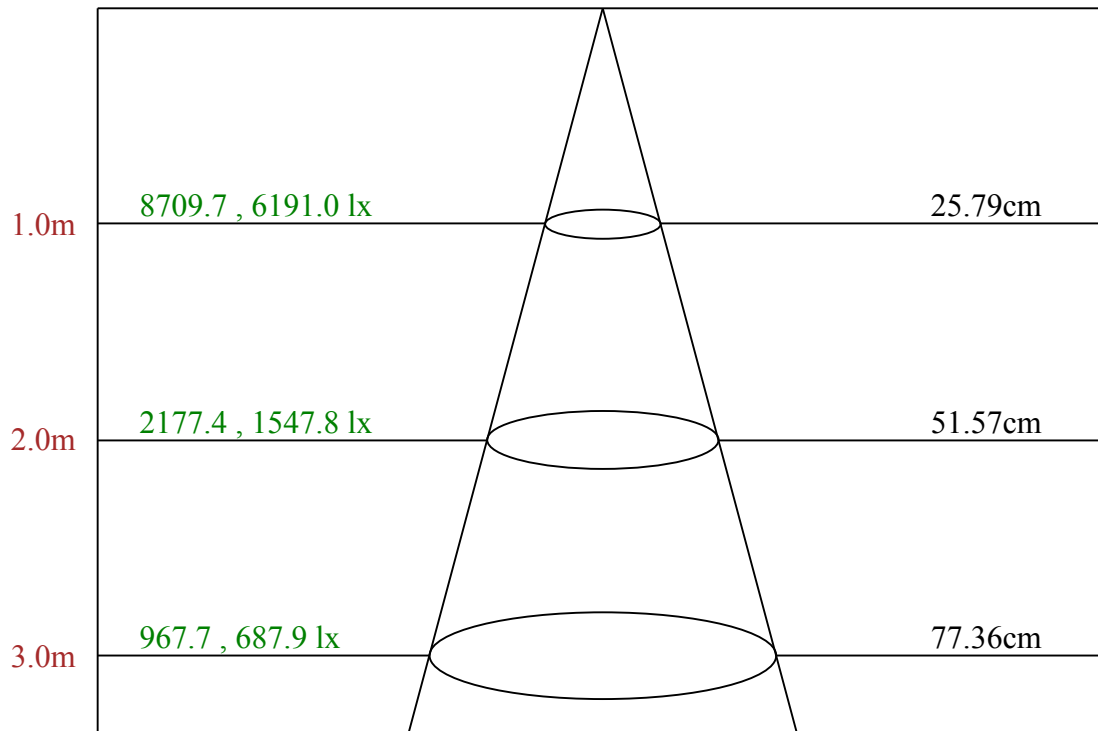
Equipment: equipamento lumini  
Temperature(°C): 25.0

Date: 24/06/2025  
Humidity(%): 58.0%

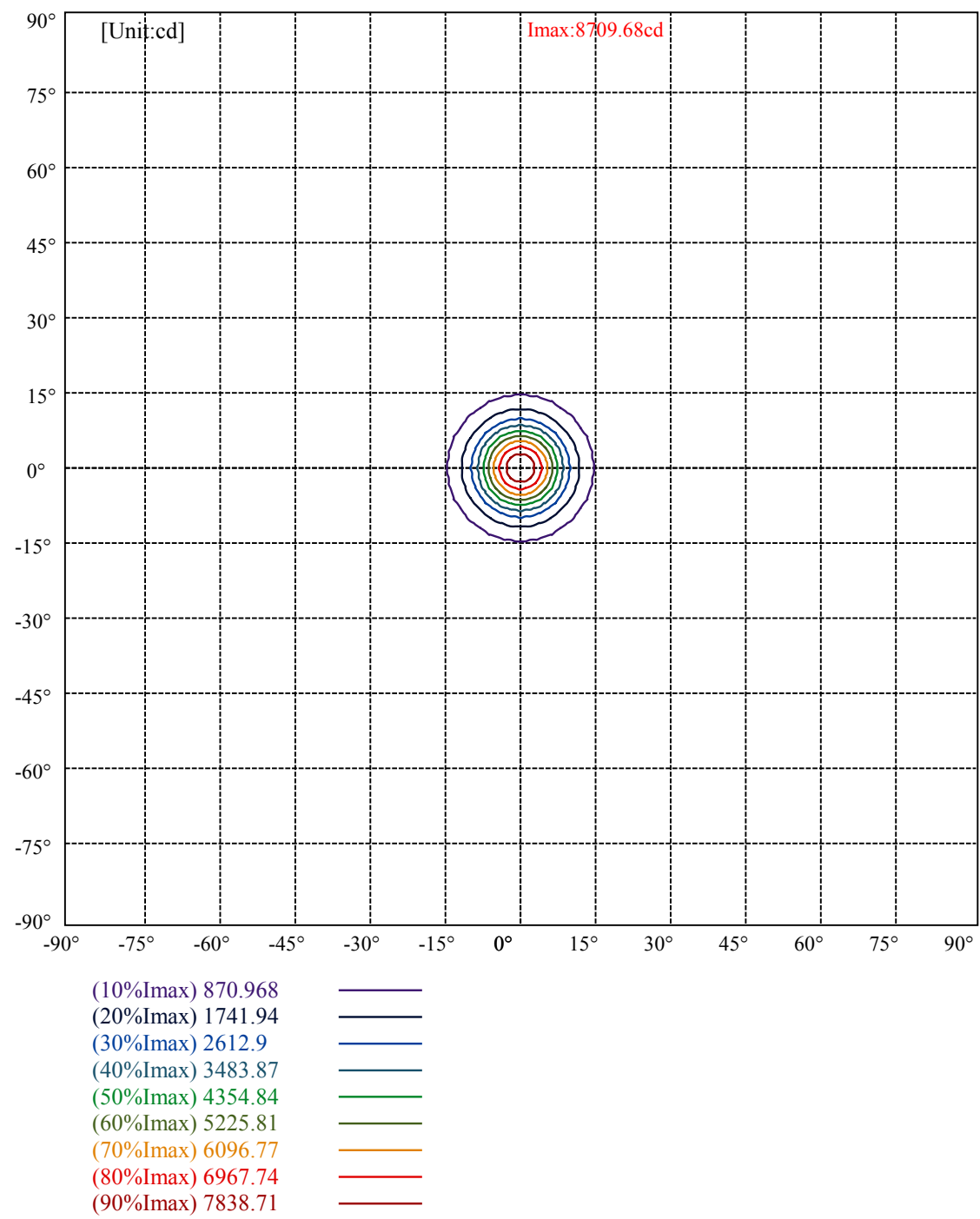
Operator: 01  
Distance(m): 6.90



C0(Max):  
C0/C180:  
C90/C270:



Max , Ave      Beam angle of C0 plane 14.69



## lumini

### Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
|----------|------|------|------|------|------|------|------|------|------|
| C0       | 1811 | 1438 | 1336 | 1321 | 1470 | 1779 | 2362 | 3488 | 6950 |
| C45      | 1811 | 1438 | 1336 | 1321 | 1470 | 1779 | 2362 | 3488 | 6950 |
| C90      | 1811 | 1438 | 1336 | 1321 | 1470 | 1779 | 2362 | 3488 | 6950 |

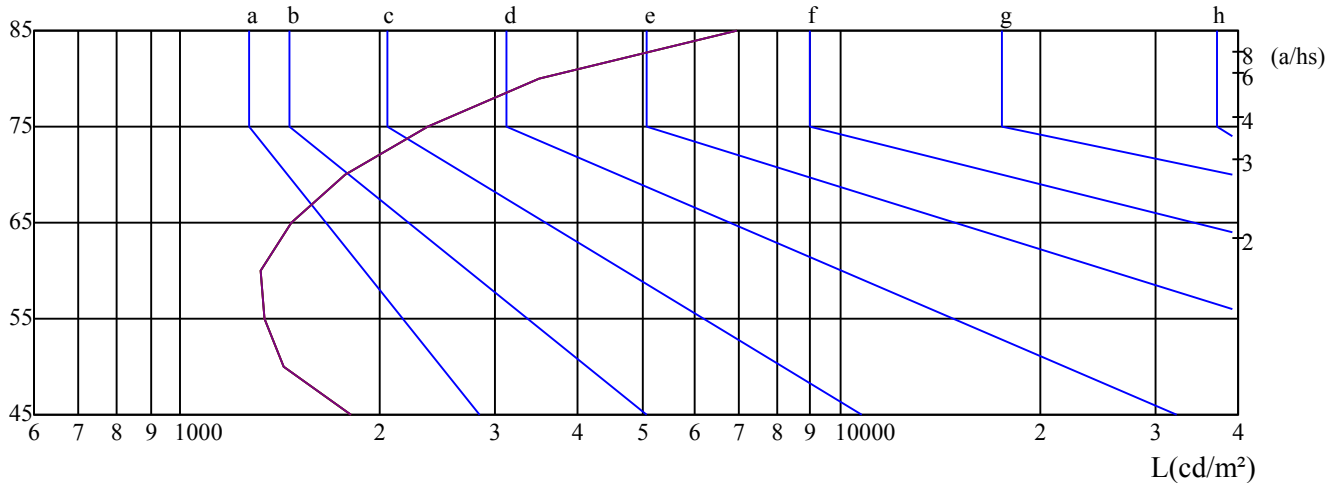
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 1470       | 1470       | 1470    | 2362       | 2362       | 2362    | 6950       | 6950       | 6950    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 24/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email: laboratorio@lumini.com.br  
Tel: +55 11 3437-5555 Fax: +55 11 3437-5555  
Address: Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fm

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 350mA

Report No:

Voltage(V): 127.7300

Test No:

Current(A): 0.1160

Number of Lamps: 1

Power (W): 14.6140

Lamp flux(lm): 1185.0

PF: 0.9860

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 902.40, Efficiency(%): 76.15% , Luminous Efficacy(lm/W): 61.75

Central intensity(cd): 6756.930, Maximum intensity(cd): 6756.930

Angle of maximum intensity:  $C=0.0$   $\gamma=0.0$

Beam angle of C0 plane : 19.32

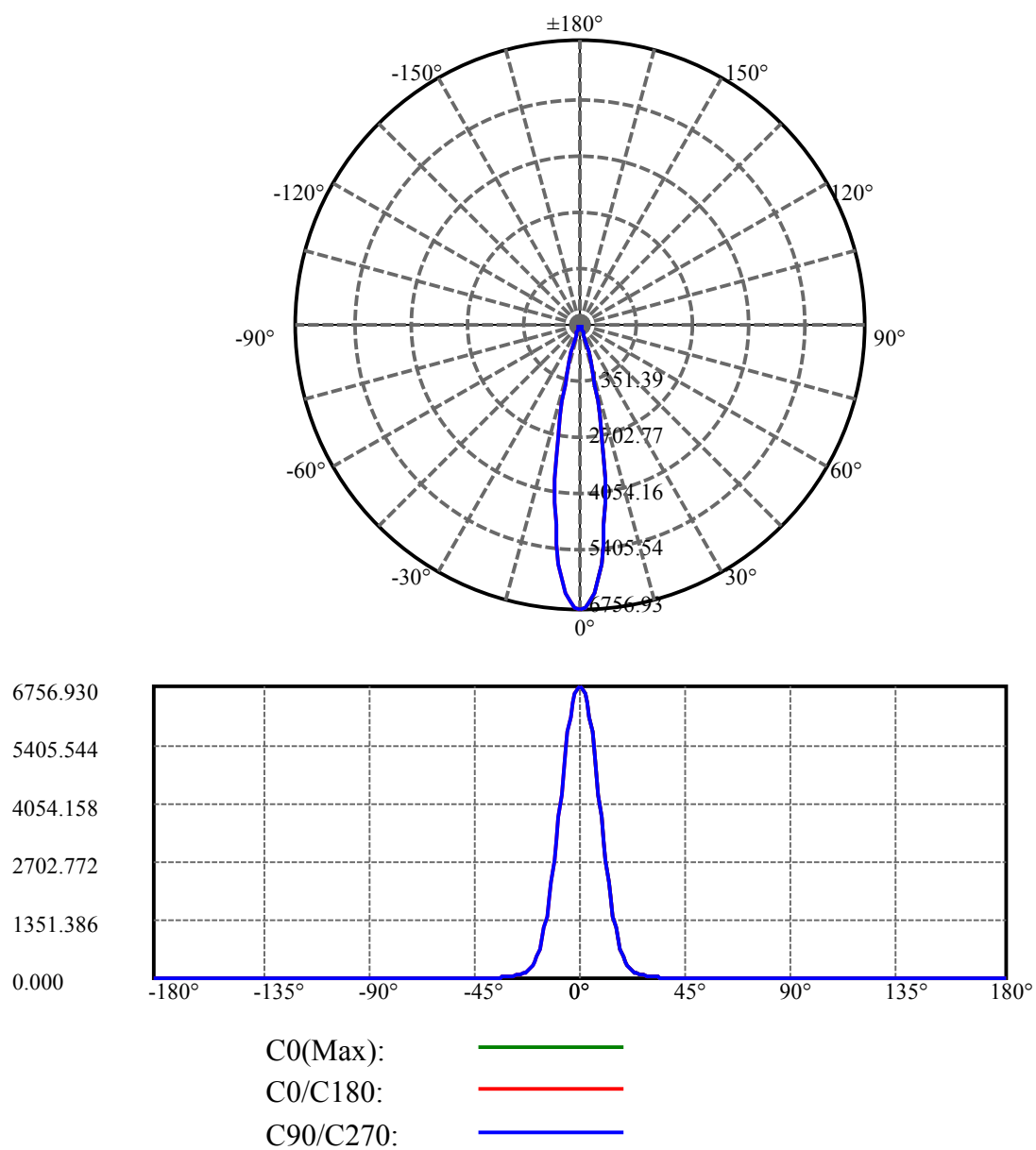
Average BeamAngle(IEC 61341): 19.32

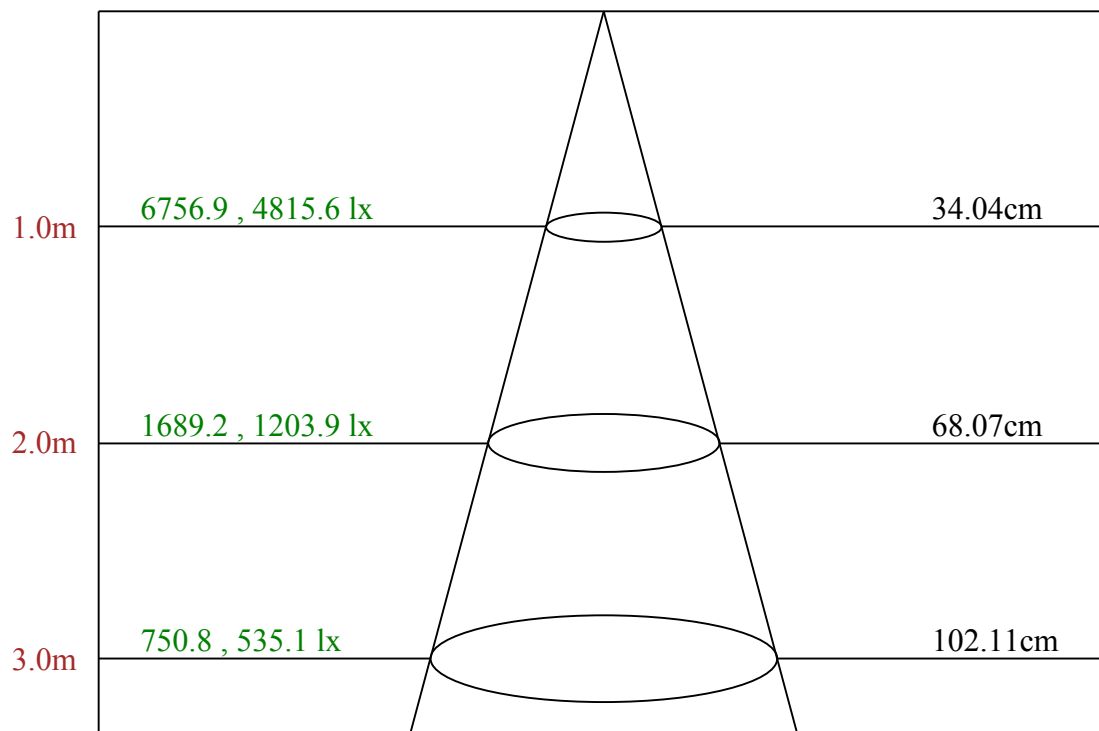
---

Equipment: equipamento lumini  
Temperature(°C): 25.0

Date: 24/06/2025  
Humidity(%): 58.0%

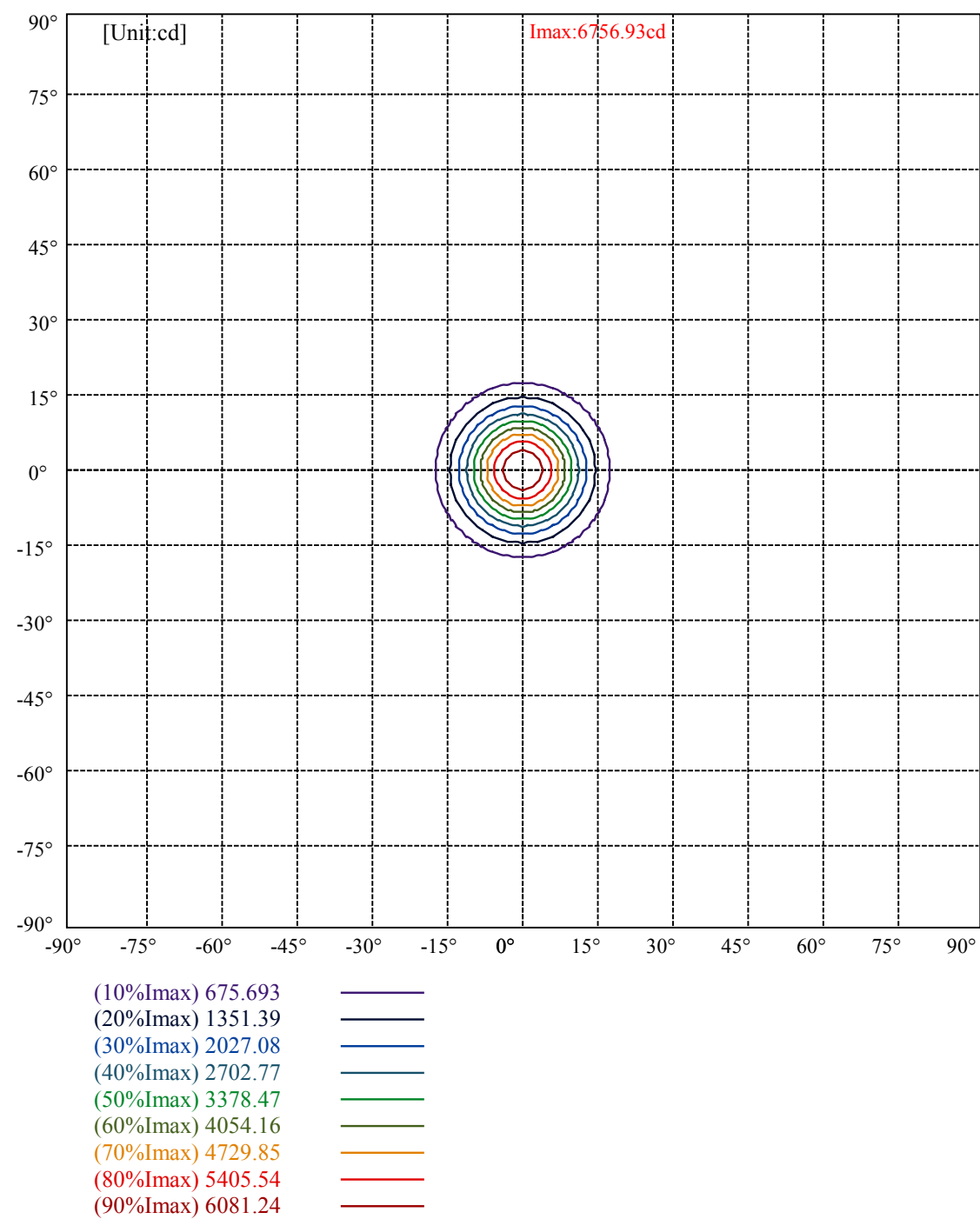
Operator: 01  
Distance(m): 6.90





Max , Ave

Beam angle of C0 plane 19.32



## lumini

### Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
|----------|------|------|------|------|------|------|------|------|------|
| C0       | 1813 | 1530 | 1456 | 1468 | 1653 | 2034 | 2667 | 3975 | 7887 |
| C45      | 1813 | 1530 | 1456 | 1468 | 1653 | 2034 | 2667 | 3975 | 7887 |
| C90      | 1813 | 1530 | 1456 | 1468 | 1653 | 2034 | 2667 | 3975 | 7887 |

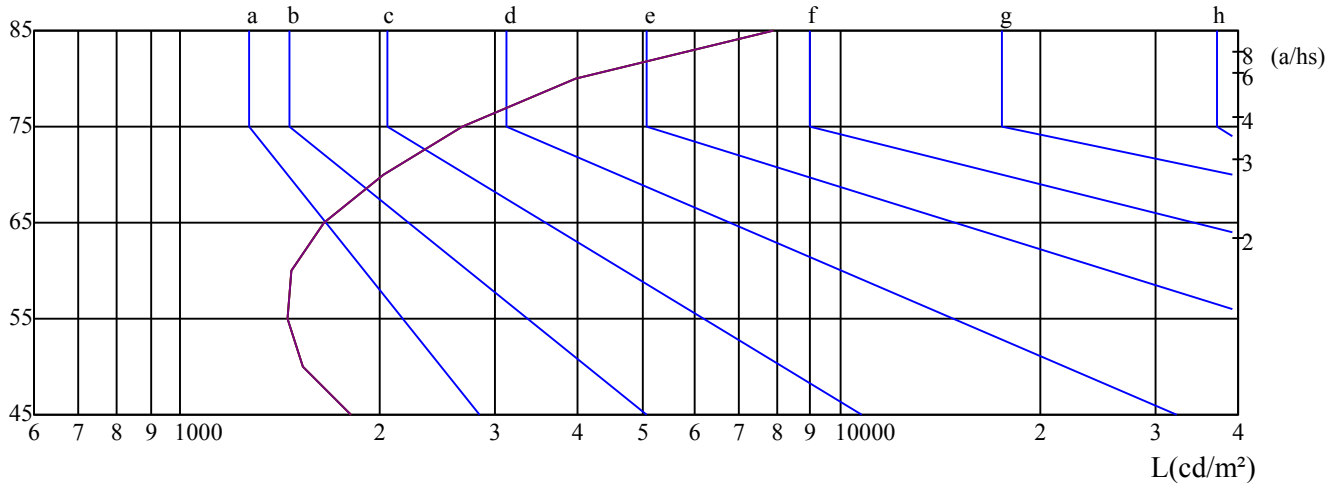
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 1653       | 1653       | 1653    | 2667       | 2667       | 2667    | 7887       | 7887       | 7887    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini  
Temperature( $^{\circ}\text{C}$ ): 25.0

Date: 24/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email:laboratorio@lumini.com.br  
Tel:+55 11 3437-5555 Fax:+55 11 3437-5555  
Address:Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fa

LampCAT: modulo led 12W 30K irc 90

Ballast type: led driver 350mA

Report No:

Voltage(V): 127.7300

Test No:

Current(A): 0.1160

Number of Lamps: 1

Power (W): 14.6120

Lamp flux(lm): 1185.0

PF: 0.9860

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 938.59, Efficiency(%): 79.21% , Luminous Efficacy(lm/W): 64.23

Central intensity(cd): 2848.708, Maximum intensity(cd): 2848.708

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam angle of C0 plane : 32.72

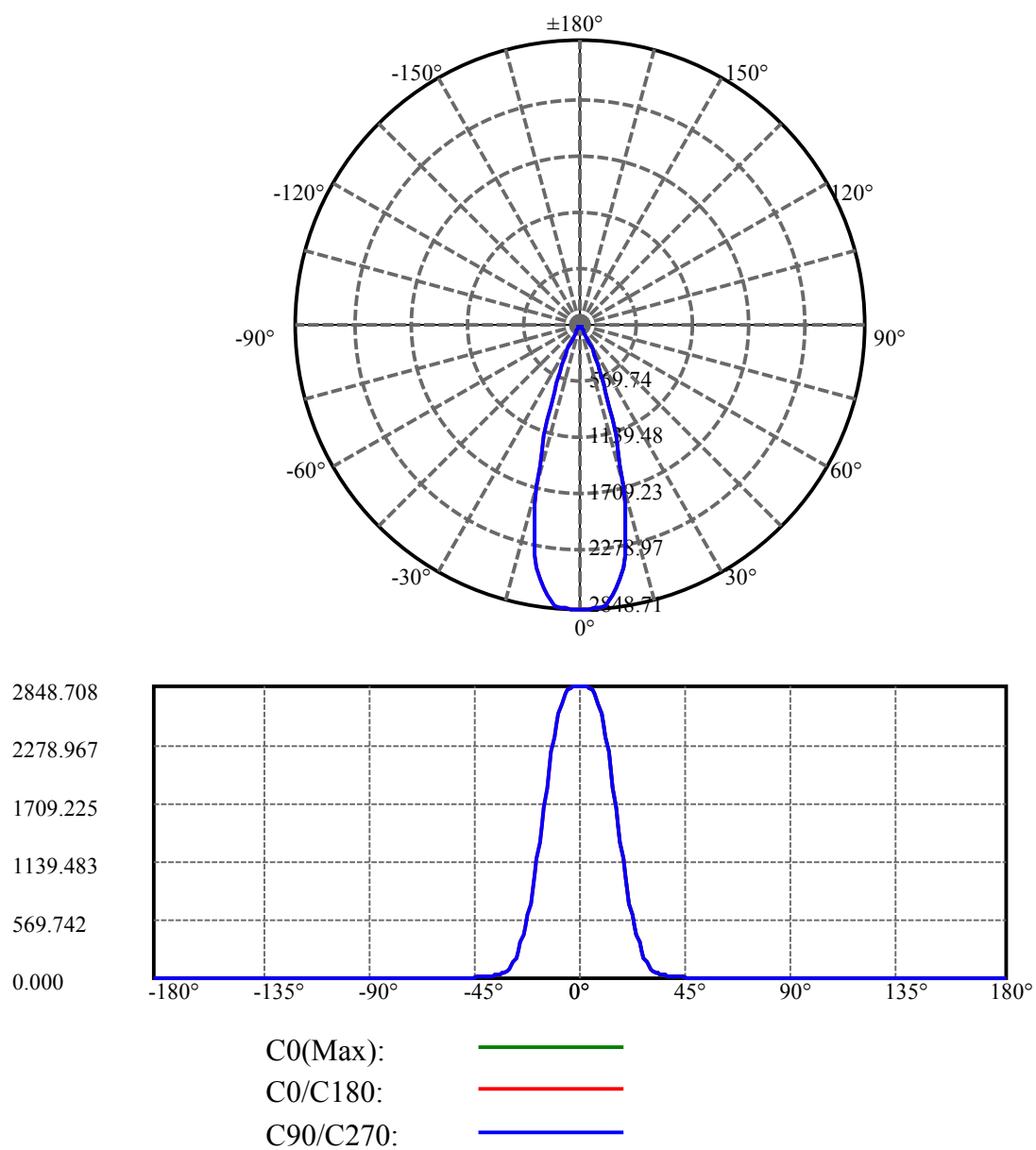
Aveage BeamAngle(IEC 61341):32.72

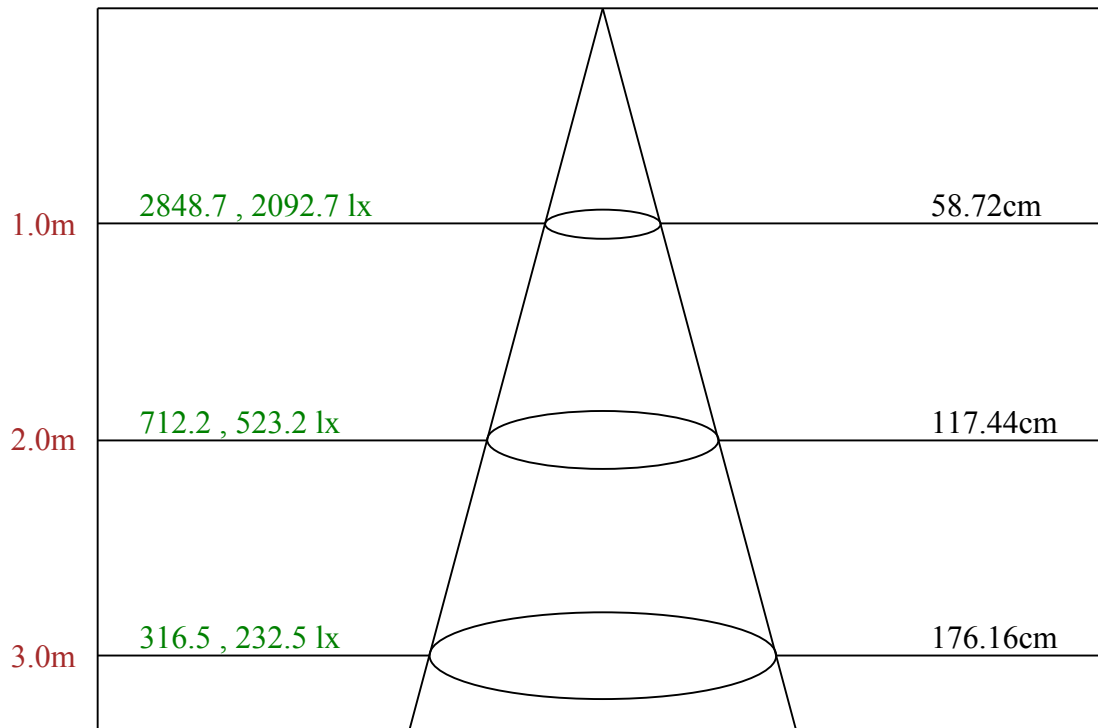
---

Equipment: equipamento lumini  
Temperature(°C): 25.0

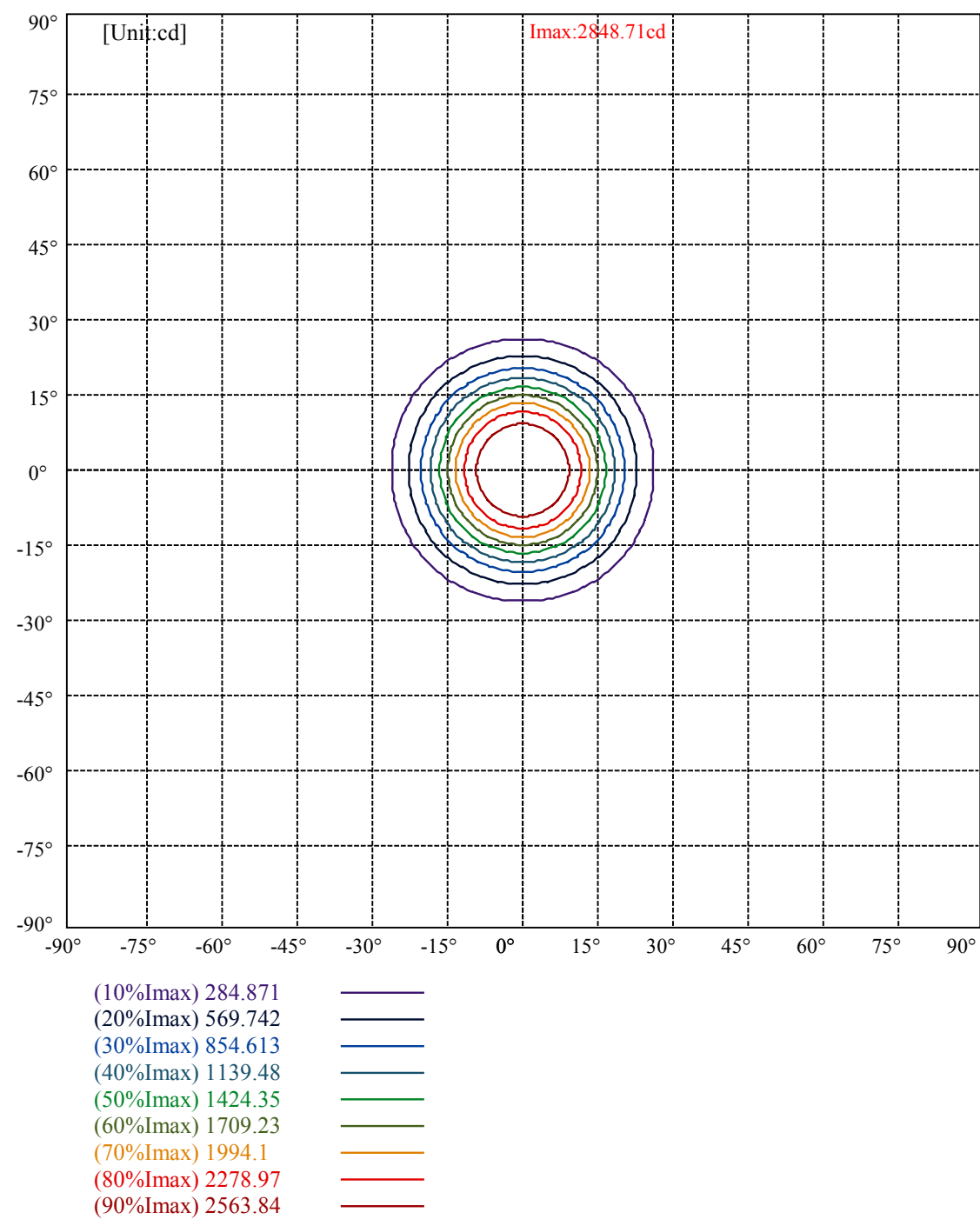
Date: 24/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90





Max , Ave      Beam angle of C0 plane 32.72



## lumini

### Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
|----------|------|------|------|------|------|------|------|------|------|
| C0       | 2743 | 1795 | 1523 | 1518 | 1706 | 2072 | 2737 | 4088 | 8129 |
| C45      | 2743 | 1795 | 1523 | 1518 | 1706 | 2072 | 2737 | 4088 | 8129 |
| C90      | 2743 | 1795 | 1523 | 1518 | 1706 | 2072 | 2737 | 4088 | 8129 |

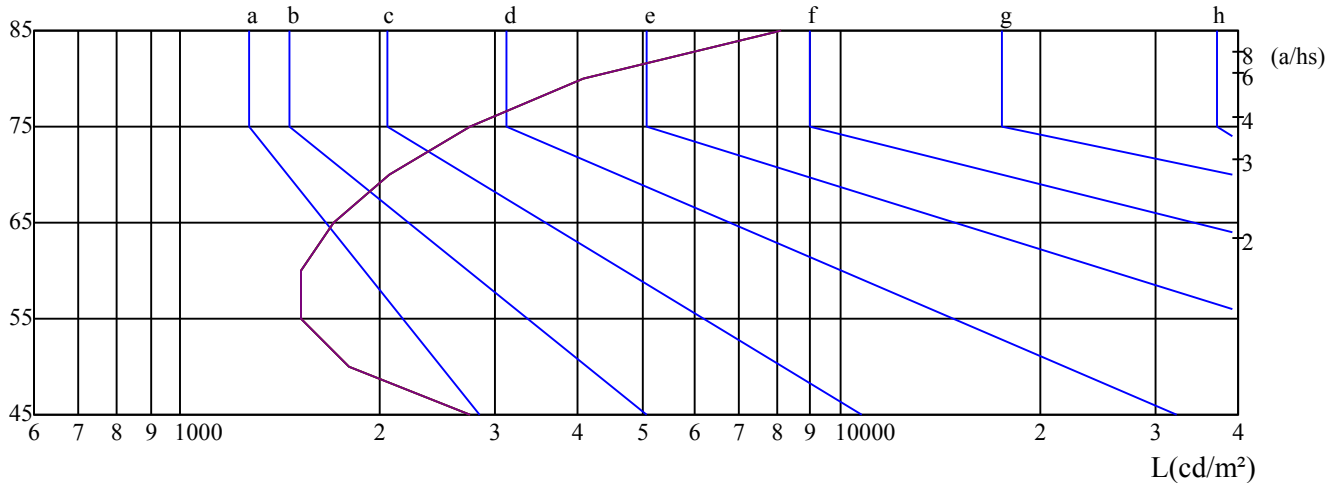
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 1706       | 1706       | 1706    | 2737       | 2737       | 2737    | 8129       | 8129       | 8129    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 24/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email:laboratorio@lumini.com.br  
Tel:+55 11 3437-5555 Fax:+55 11 3437-5555  
Address:Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fc

LampCAT: modulo led 18W 30K irc 90

Ballast type: led driver 500mA

Report No:

Voltage(V): 221.2300

Test No:

Current(A): 0.1050

Number of Lamps: 1

Power (W): 21.5890

Lamp flux(lm): 1585.0

PF: 0.9320

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 1130.37, Efficiency(%): 71.32% , Luminous Efficacy(lm/W): 52.36

Central intensity(cd): 11570.990, Maximum intensity(cd): 11570.990

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam angle of C0 plane : 14.77

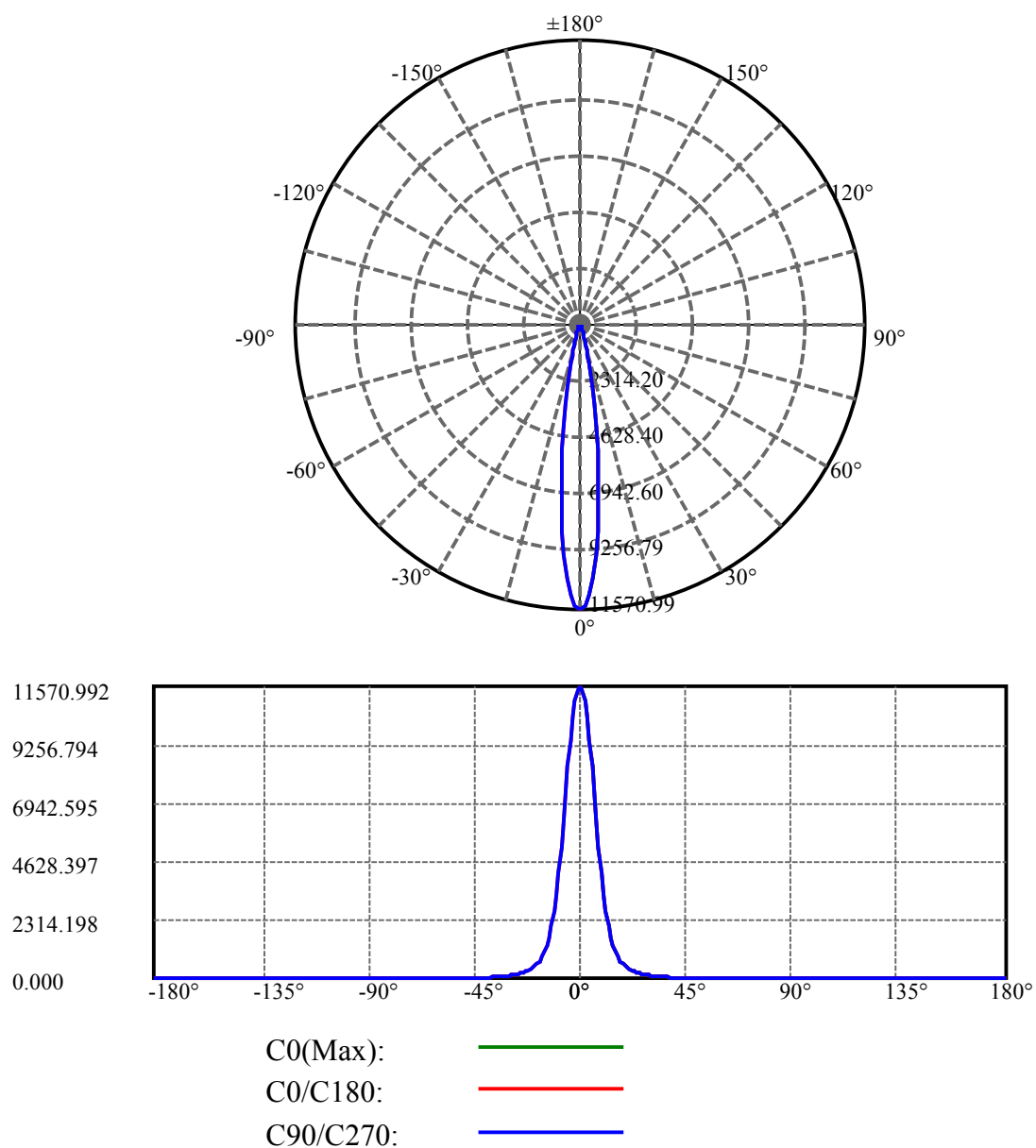
Aveage BeamAngle(IEC 61341):14.77

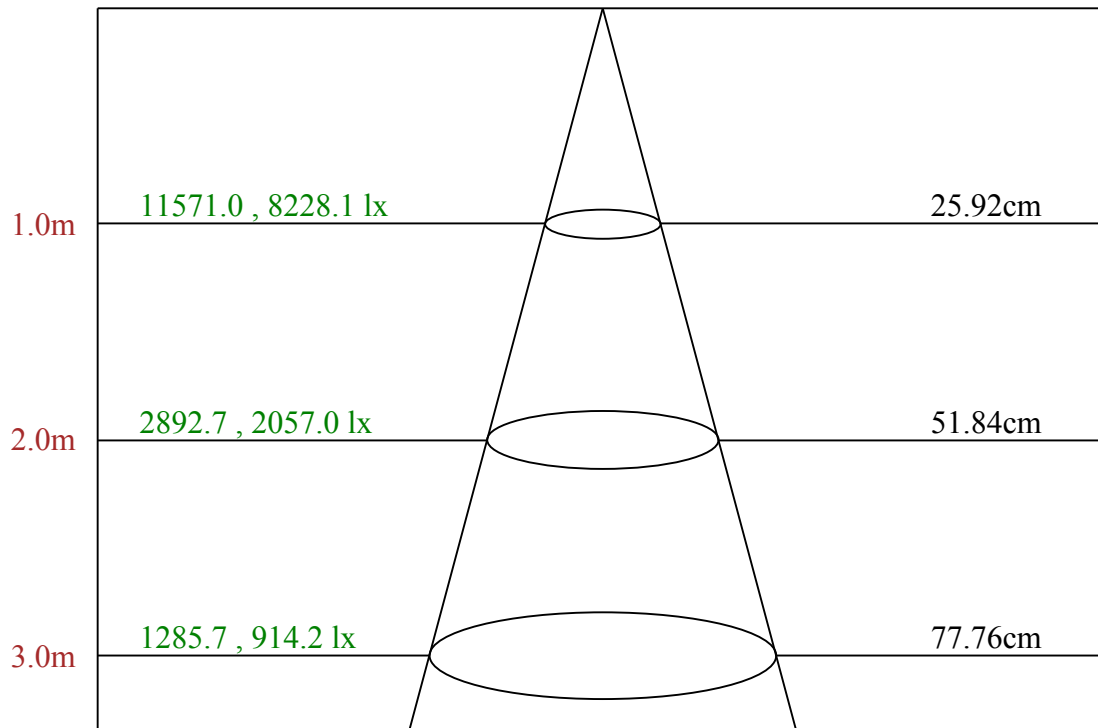
---

Equipment: equipamento lumini  
Temperature(°C): 25.0

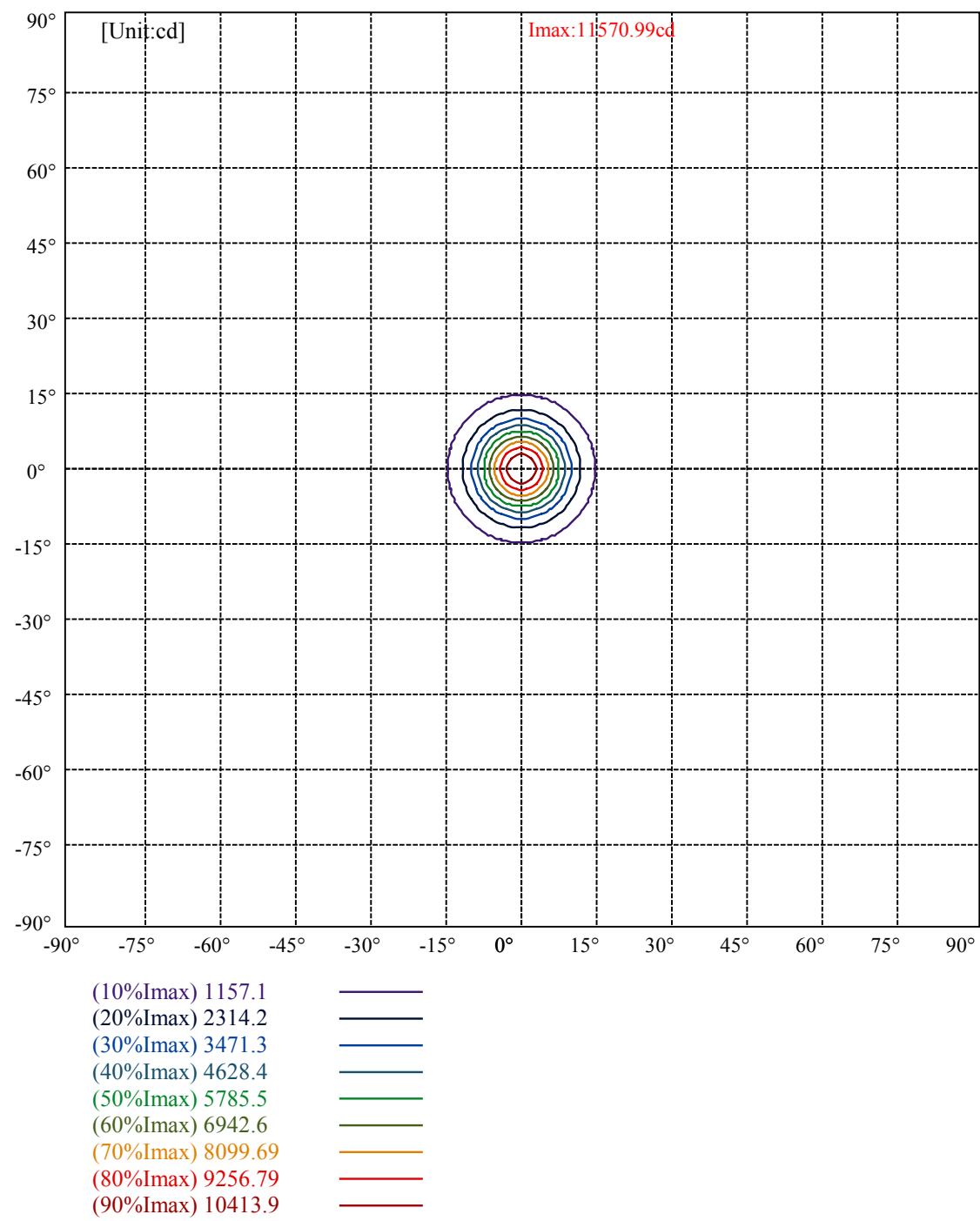
Date: 24/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90





Max , Ave      Beam angle of C0 plane 14.77



## lumini

### Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

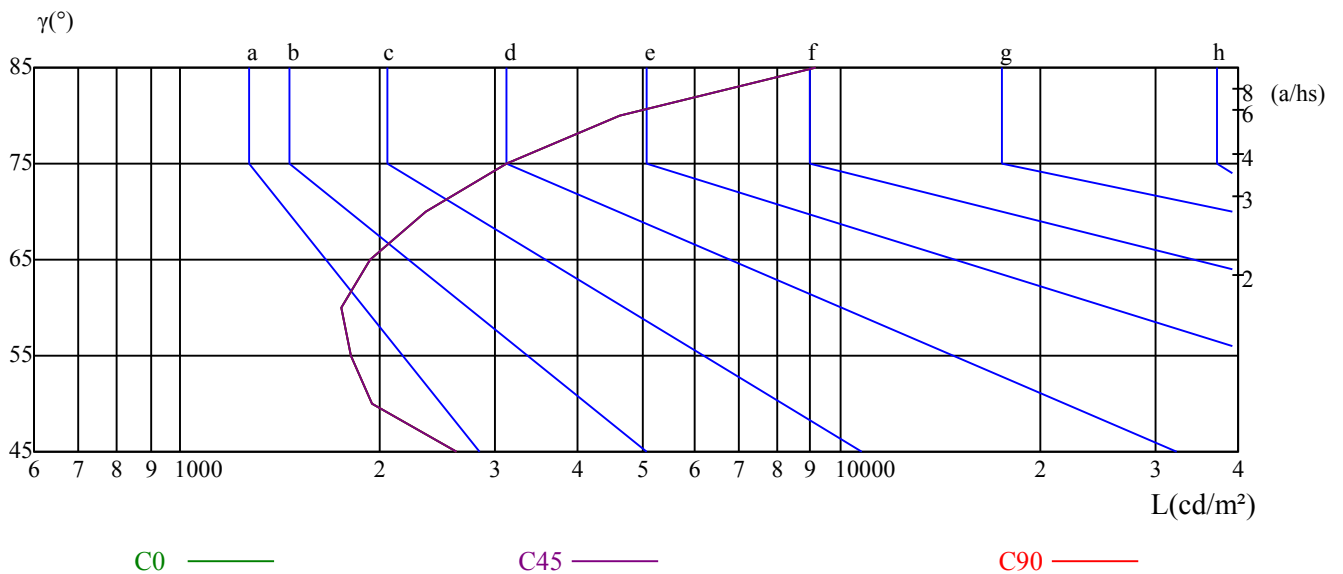
| $\gamma$ | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   |
|----------|------|------|------|------|------|------|------|------|------|
| C0       | 2614 | 1953 | 1807 | 1755 | 1940 | 2352 | 3124 | 4624 | 9180 |
| C45      | 2614 | 1953 | 1807 | 1755 | 1940 | 2352 | 3124 | 4624 | 9180 |
| C90      | 2614 | 1953 | 1807 | 1755 | 1940 | 2352 | 3124 | 4624 | 9180 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 1940       | 1940       | 1940    | 3124       | 3124       | 3124    | 9180       | 9180       | 9180    |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve



Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 24/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email:laboratorio@lumini.com.br  
Tel:+55 11 3437-5555 Fax:+55 11 3437-5555  
Address:Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fm

LampCAT: modulo led 18W 30K irc 90

Ballast type: led driver 500mA

Report No:

Voltage(V): 221.2600

Test No:

Current(A): 0.1050

Number of Lamps: 1

Power (W): 21.6260

Lamp flux(lm): 1585.0

PF: 0.9320

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 1191.51, Efficiency(%): 75.17% , Luminous Efficacy(lm/W): 55.10

Central intensity(cd): 9041.877, Maximum intensity(cd): 9041.877

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam angle of C0 plane : 19.14

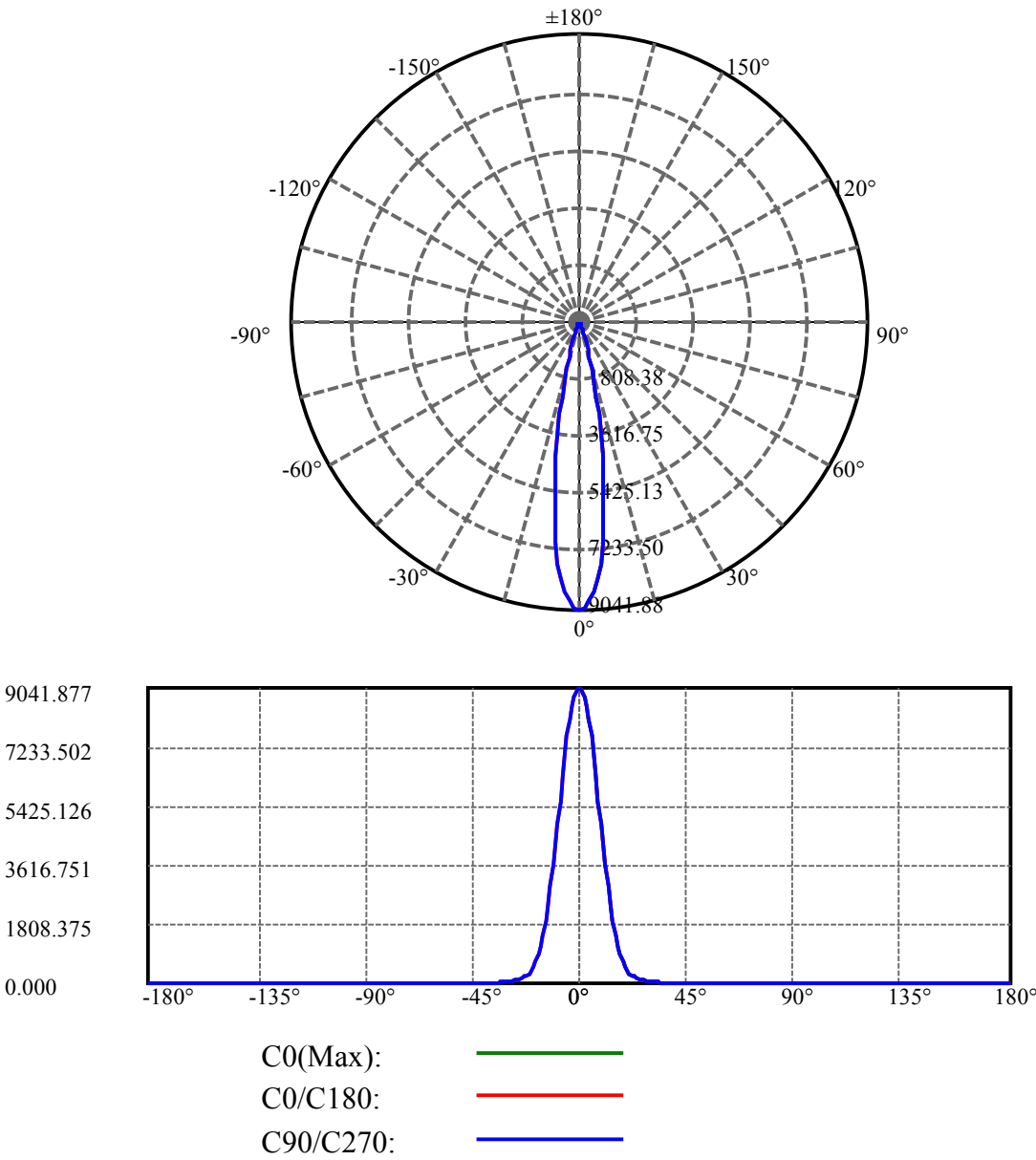
Aveage BeamAngle(IEC 61341):19.14

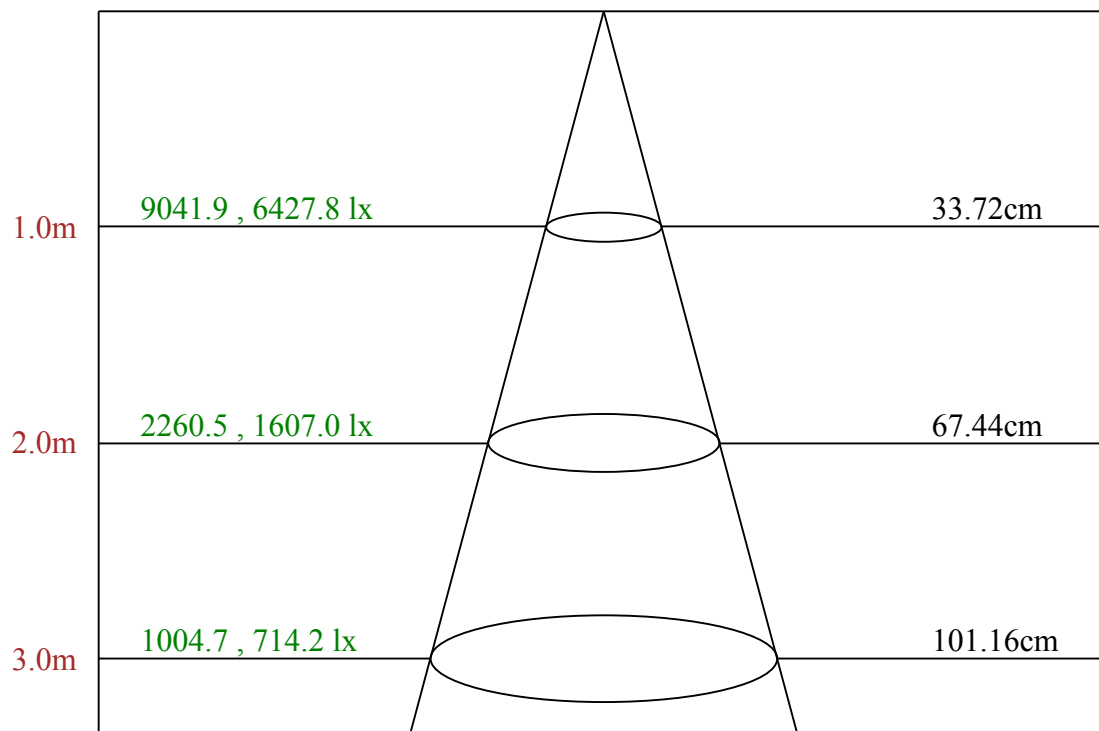
---

Equipment: equipamento lumini  
Temperature(°C): 25.0

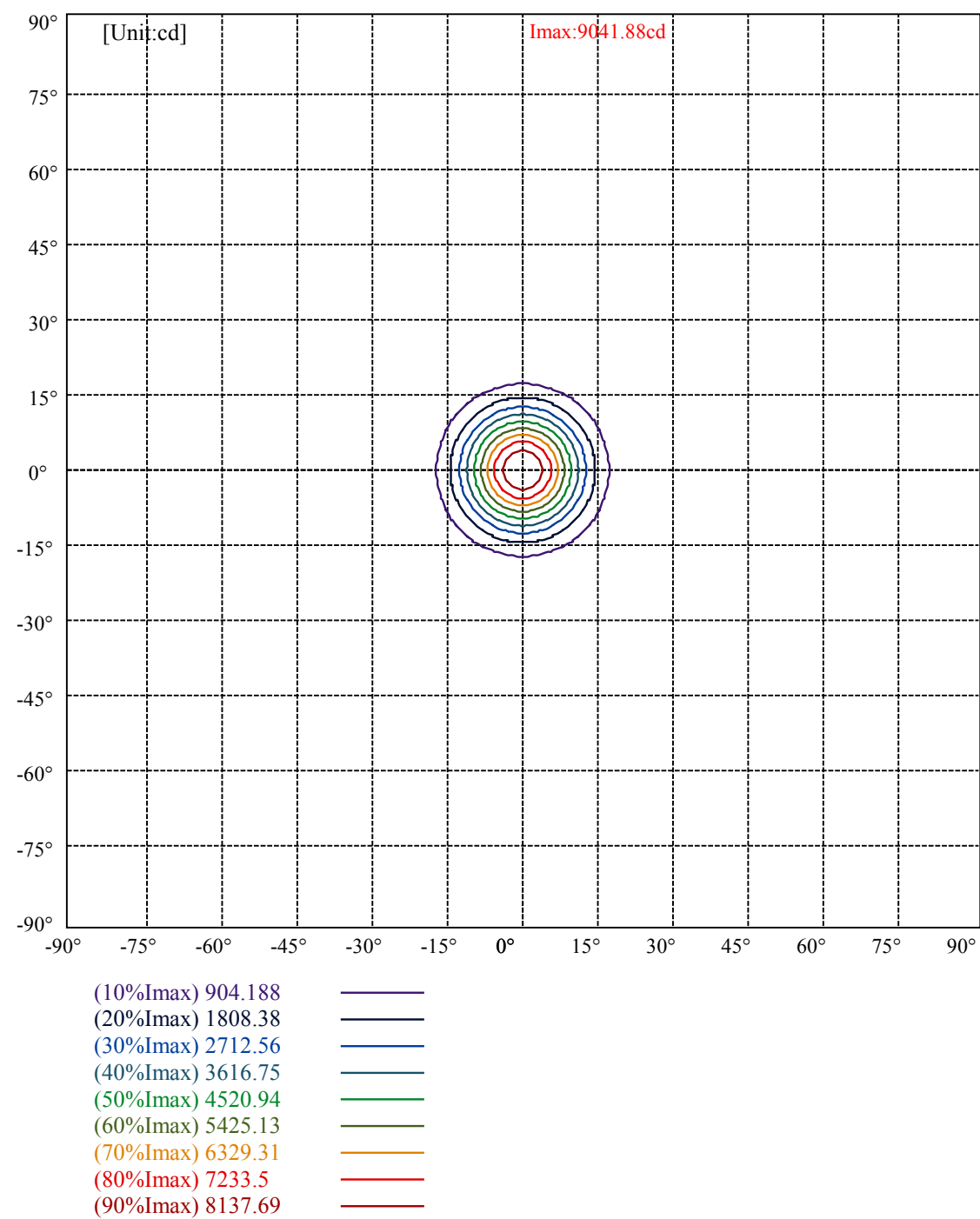
Date: 23/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90





Max , Ave      Beam angle of C0 plane 19.14



# lumini

## Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85    |
|----------|------|------|------|------|------|------|------|------|-------|
| C0       | 2402 | 2009 | 1891 | 1876 | 2110 | 2566 | 3380 | 5037 | 10069 |
| C45      | 2402 | 2009 | 1891 | 1876 | 2110 | 2566 | 3380 | 5037 | 10069 |
| C90      | 2402 | 2009 | 1891 | 1876 | 2110 | 2566 | 3380 | 5037 | 10069 |

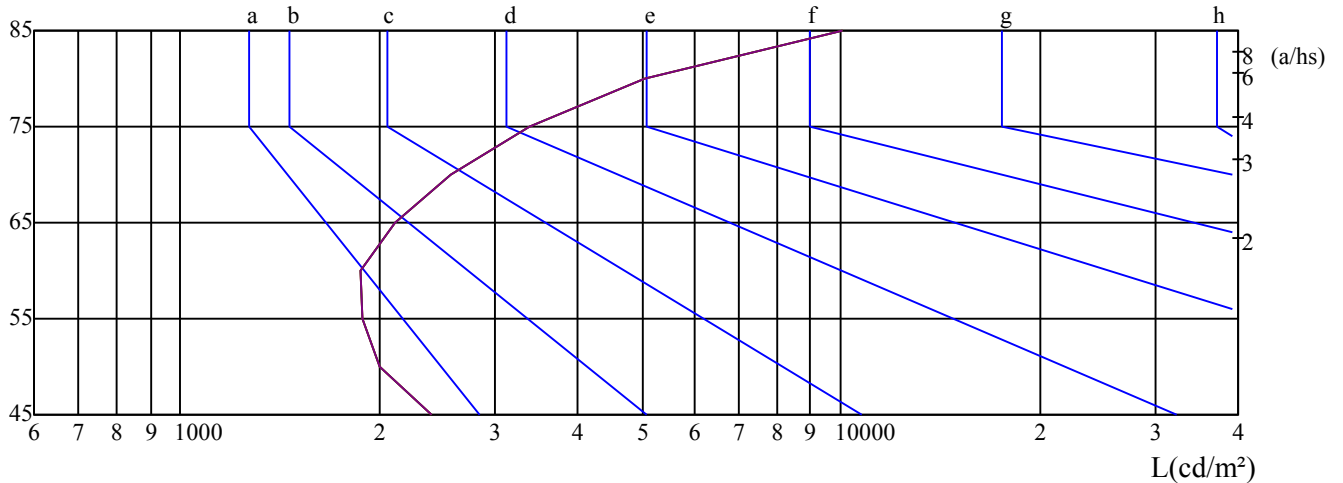
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 2110       | 2110       | 2110    | 3380       | 3380       | 3380    | 10069      | 10069      | 10069   |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 23/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90



lumini Solucoes em Iluminacao LTDA  
www.lumini.com.br  
Email:laboratorio@lumini.com.br  
Tel:+55 11 3437-5555 Fax:+55 11 3437-5555  
Address:Rua Ferreira Viana, 716 - Socorro - São Paulo/SP

---

## lumini

---

LumCAT:

Luminaire: spectra flex mini frame fa

LampCAT: modulo led 18W 30K irc 90

Ballast type: led driver 500mA

Report No:

Voltage(V): 221.2700

Test No:

Current(A): 0.1050

Number of Lamps: 1

Power (W): 21.5950

Lamp flux(lm): 1585.0

PF: 0.9320

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 1242.65, Efficiency(%): 78.40% , Luminous Efficacy(lm/W): 57.54

Central intensity(cd): 3709.331, Maximum intensity(cd): 3709.331

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam angle of C0 plane : 33.07

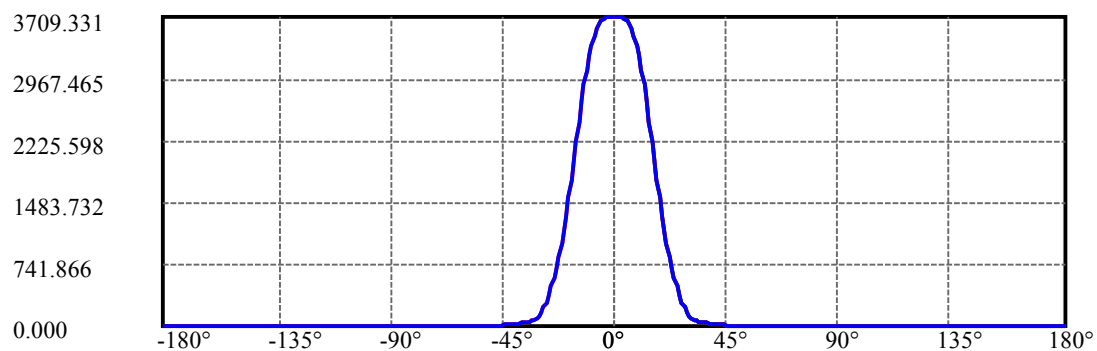
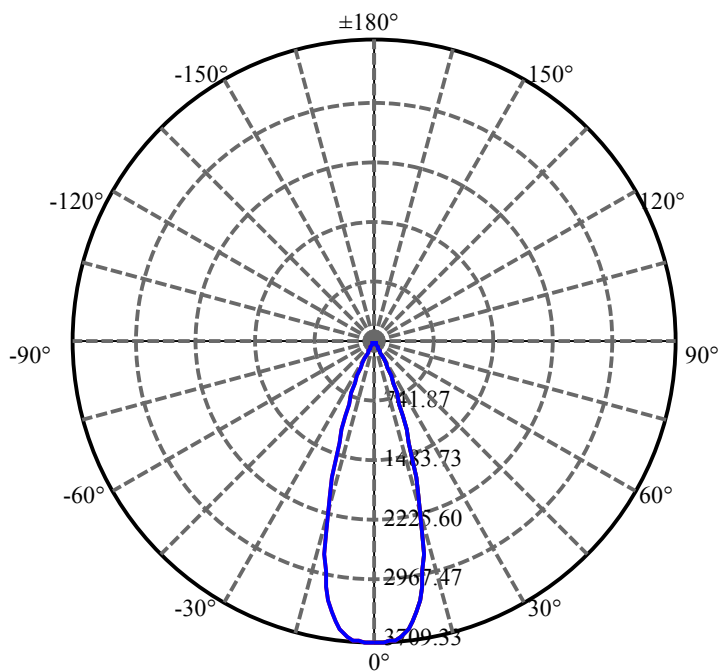
Aveage BeamAngle(IEC 61341):33.07

---

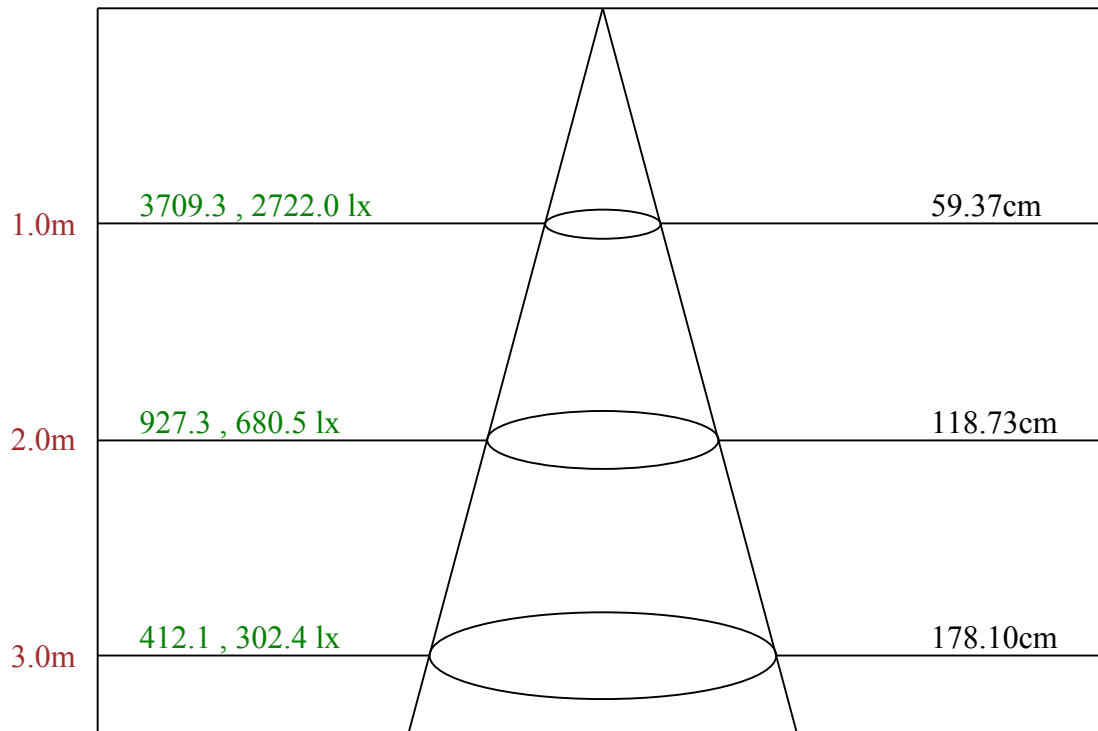
Equipment: equipamento lumini  
Temperature(°C): 25.0

Date: 23/06/2025  
Humidity(%): 58.0%

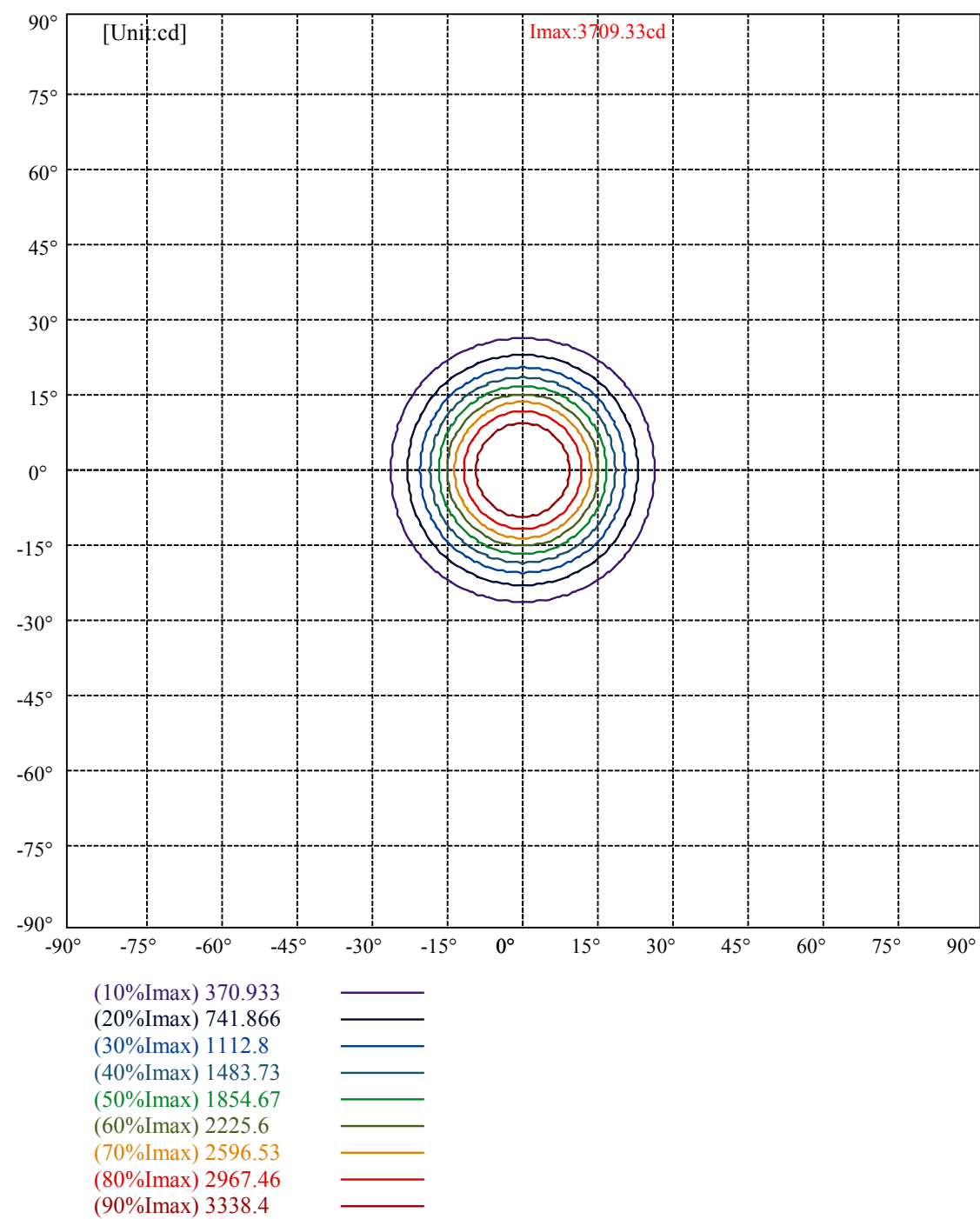
Operator: 01  
Distance(m): 6.90



C0(Max):  
C0/C180:  
C90/C270:



Max , Ave      Beam angle of C0 plane 33.07



## lumini

### Luminance Limiting Curve(no luminous side)

Appendix Page: 5 Total:5

Luminance Table

| $\gamma$ | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85    |
|----------|------|------|------|------|------|------|------|------|-------|
| C0       | 3777 | 2321 | 1918 | 1918 | 2136 | 2623 | 3450 | 5151 | 10214 |
| C45      | 3777 | 2321 | 1918 | 1918 | 2136 | 2623 | 3450 | 5151 | 10214 |
| C90      | 3777 | 2321 | 1918 | 1918 | 2136 | 2623 | 3450 | 5151 | 10214 |

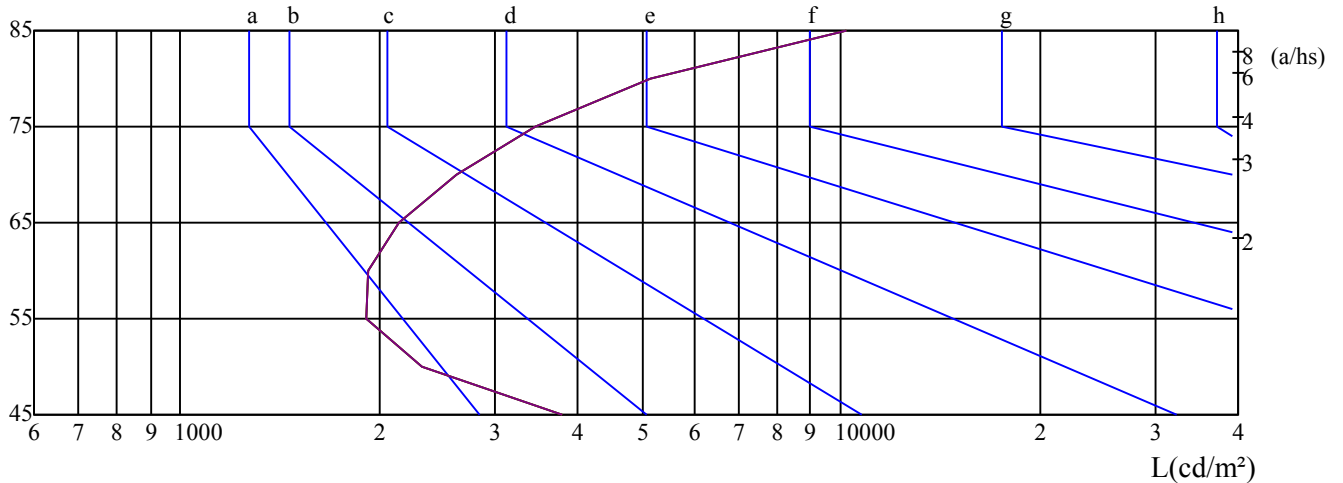
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 2136       | 2136       | 2136    | 3450       | 3450       | 3450    | 10214      | 10214      | 10214   |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

$\gamma(^{\circ})$



C0 ———

C45 ———

C90 ———

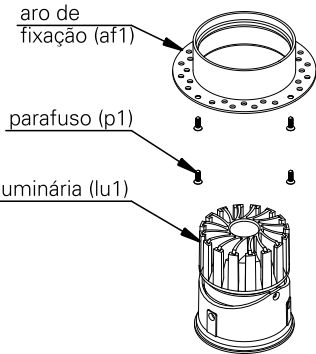
Equipment: equipamento lumini  
Temperature( $^{\circ}$ C): 25.0

Date: 23/06/2025  
Humidity(%): 58.0%

Operator: 01  
Distance(m): 6.90

spectra

spectra flex no frame 6w  
spectra flex no frame 12w  
spectra flex no frame 18w



atenção

leia atentamente todas as instruções relacionadas ao seu produto antes de utilizá-lo.

antes de iniciar a instalação, certifique-se que a energia elétrica esteja desligada.

não são permitidas modificações no produto, esse deve atender à finalidade para a qual foi projetado e ser utilizado de acordo com as especificações técnicas.

em caso de dúvidas, entre em contato com o fabricante.

especificações técnicas

fonte de luz  
módulo led integrado (incluso)

índice de proteção  
IP20 - luminária para uso interno

peso  
spectra flex no frame 6w - 0,4 kg  
spectra flex no frame 12w - 0,4 kg  
spectra flex no frame 18w - 0,5 kg

cuidados com o produto  
o produto deve ser manuseado com cuidado para evitar riscos e deformações.

para limpeza, utilize detergente neutro e um pano de algodão macio. finalize com um pano de algodão seco.

instalação

conteúdo da embalagem  
1 luminária

ferramentas necessárias  
chave philips

informações importantes  
para a instalação, lave e seque as mãos, use luvas descartáveis.

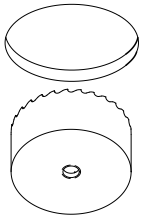
antes de iniciar a instalação, certifique-se que a energia elétrica esteja desligada.

retire a luminária da embalagem com cuidado e apoie-o em uma superfície limpa e seca.

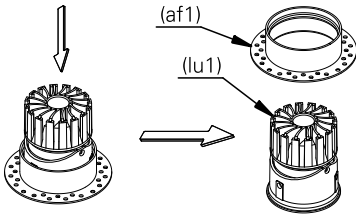
instalação passo a passo



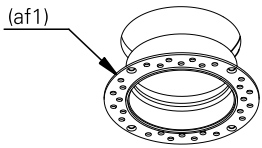
1. faça um nicho no forro conforme a tabela abaixo:  
spectra flex no frame 6w - nicho = Ø75  
spectra flex no frame 12w - nicho = Ø75  
spectra flex no frame 18w - nicho = Ø75



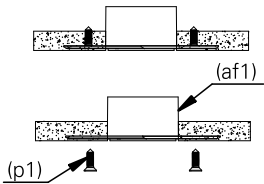
2. segure o aro de fixação (af1) empurre a luminária (lu1).



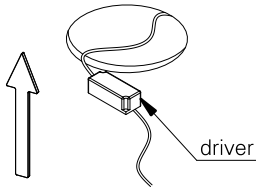
3. encaixe o aro de fixação (af1) no nicho.



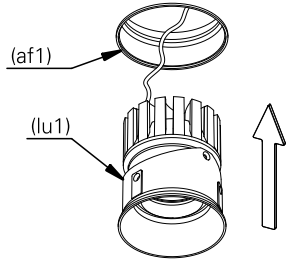
4. utilize os parafusos (p1) para fixar o aro de fixação (af1), em seguida faça o acabamento no forro cobrindo-o com a massa de acabamento, não deixando o parafuso aparente.



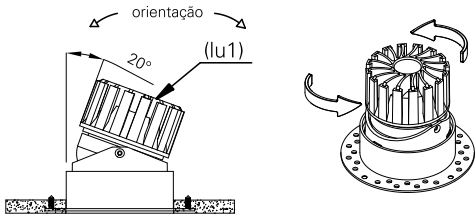
5. aloje o driver sobre o forro. faça a conexão entre os cabos condutores da luminária e os fios da rede elétrica, utilize conectores apropriados para garantir o contato firme e seguro. caso necessário isole-os separadamente com fita isolante.



6. encaixe a luminária (lu1) no aro de fixação (af1).



7. para orientar o fecho de luz, mova a luminária (lu1) para direção e rotação conforme indicado.



8. a luminária após instalada deverá ficar como ilustrado na imagem. ligue a rede elétrica e teste o seu funcionamento.

